

# EXHIBIT 1

**Expert Report of Dr. Jennifer King**

**FTC vs. Match Group, Inc. and Match Group, LLC.**

**Jan. 13, 2023**

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# 1. Summary of Conclusions

Match is an online dating service established in 1995 with as many as 21.5 million members. The company describes its mission as helping “singles find the kind of relationship they’re looking for.”<sup>1</sup> Match.com allows members to post photos, written expressions, and relationship preferences to their profile and operates an “anonymous” email network by which members’ profile remains private until they confirm a match. The company advertises several subscription packages, including a six month subscription which, prior to mid-2019, featured a “Match Guarantee.” Despite these offers, multiple customers have filed complaints about their difficulty and/or inability to cancel their subscriptions. The FTC’s complaint calls Match.com’s cancellation process “convoluted and confusing;” this is corroborated by statements from Match.com’s head of customer service: “it’s been the same complaint for the past decade that I’ve been with Match . . . It takes up to 7 or 8 clicks to complete the flow to turn off [subscriptions] if you can even figure out how to do it.”<sup>2, 3</sup>

The FTC asked me to evaluate Match.com’s cancellation flow based on the following inquiries:

**1. Was Match.com’s cancellation process easy to use?**

**2. Was Match.com’s cancellation process easy to find?**

I examined the cancellation flow for 2016, 2019, and 2022, documenting changes to password screens, buttons, links, and copywriting. Based on this evidence, I conclude the following:

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<sup>1</sup> <https://www.match.com/help/aboutus.aspx?lid=4>

<sup>2</sup> 116 - First Amended Complaint.pdf, 20.

<sup>3</sup> MATCH320168\_image.pdf



**Q1: Was Match.com’s cancellation process easy to use?**

No. Match.com’s cancellation procedure was not easy or simple to use.

- The lack of breadcrumb navigation (2022), labeling of steps, and visibility of system status makes it hard for users to know where they are in the cancellation process.
- Inconsistent design and labeling at various steps in the process was confusing.
- The inclusion of extraneous steps, including password authentication and survey questions, introduced unnecessary friction and made the cancellation process longer than necessary and more difficult.

**Q2: Was Match.com’s cancellation process easy to find?**

No. Match.com’s cancellation process was not easy for users to locate.

- The discoverability of the cancellation process is buried under indirect settings and language (e.g. “Manage Subscription,” “Manage Account”).
- Similarly, Match.com’s help site buries information about subscription cancellation in their help pages under a “See all articles” link. Upon clicking it, the “Canceling” page appears at the bottom of the help site.
- There is one primary pathway to cancellation; I could locate only one secondary pathway, with the link buried in the help page described above.

In investigating the ease of use and findability of Match.com’s cancellation process, I found several forms of dark design patterns including: obstruction (“Roach Motel”), forced action, hidden information, and ‘confirmshaming’ language. These patterns are harmful in that they block users from leaving an online service, compel users into undesired actions, withhold information, and pressure users through word choice and images. Moreover, I identified several points within

the cancellation flow that could cause user abandonment, including the password authentication screen and survey steps. The survey, which was not indicated as optional or skippable, was spread over two disconnected pages and featured multiple questions including a Likert scale and open text field. Existing best practices indicate that an appropriate stage to survey users would be in a post-cancellation email or post-cancellation page.

Additionally, I determined that the password screen was arbitrarily placed in the cancellation flow compared to other Account Settings that did not require password authentication. Ultimately, the cancellation flow could have been reduced to four page-steps versus Match.com's eight page-step process.

## 2. Qualification Statement

I am presently a research fellow at Stanford University, where I focus on topics related to information privacy and artificial intelligence. I obtained my Ph.D. in Information Management and Systems (Information Science) from the University of California, Berkeley School of Information in 2018, with an emphasis in Human-Computer Interaction (HCI), information law and policy, and social computing. Prior to starting my current role in January 2021, I was the Director of Consumer Privacy at the Center for Internet and Society at Stanford Law School. I am an internationally recognized expert on data privacy issues, and I am often a speaker at a wide range of academic, civil society, regulatory, and industry-sponsored conferences and events. Prior to obtaining my Ph.D. and working in the research field, I received a Master of Information Management and Systems (MIMS) degree in 2006, also from the U.C. Berkeley School of

Information. I also worked for nearly a decade in the Internet software industry, as both a product manager and web producer, where my work encompassed a range of companies and specialties.

A key area of my expertise focuses on how graphical user interfaces are designed in ways that promulgate deception, confusion, coercion, or manipulation of people encountering this content, either through deliberate intent on the part of designers, or through poor design choices. This area of study, commonly called “dark patterns,” has exploded in the last five or more years as the presence of dark patterns has become widespread across the commercial internet.<sup>4</sup> This work has been explored by UX practitioners, academic and HCI researchers including Harry Brignull, Arunesh Mathur, Colin M. Gray, whose work is cited throughout this report. Once the province of smaller companies engaged in deceptive, illicit schemes, they have been widely adopted by a range of companies with legitimate business models that nonetheless use dark patterns to impose time-pressured purchase decisions, push consumers to disclose excessive amounts of personal information that they might otherwise prefer not to disclose, or make it difficult for consumers to perform actions such as unsubscribing from paid services.

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<sup>4</sup> See generally: Jamie Luguri, Lior Jacob Strahilevitz, Shining a Light on Dark Patterns, *Journal of Legal Analysis*, Volume 13, Issue 1, 2021, Pages 43–109, <https://doi.org/10.1093/jla/laaa006>; Arunesh Mathur, Gunes Acar, Michael J. Friedman, Elena Lucherini, Jonathan Mayer, Marshini Chetty, and Arvind Narayanan. 2019; *Dark Patterns at Scale: Findings from a Crawl of 11K Shopping Websites*. Proc. ACM Hum.-Comput. Interact. 3, CSCW, Article 81; Arunesh Mathur, Jonathan Mayer & Mihir Kshirsagar, *What Makes a Dark Pattern... Dark?: Design Attributes, Normative Considerations, and Measurement Methods*, Proc. 2021 CHI Conf. on Hum. Factors Computing Sys. (2021); Colin M. Gray, Yubo Kou, Bryan Battles, Joseph Hoggatt & Austin L. Toombs, *The Dark (Patterns) Side of UX Design*, 2018 Proc. 2018 CHI Conf. on Hum. Factors Computing Sys., 9–10; Caroline Sindors and Sebastian Rieger, Policy Brief: Dark Patterns - Regulating Digital Design, Stiftung Neue Verantwortung (May 13, 2020), <https://www.stiftung-nv.de/en/publication/dark-patterns-regulating-digital-design/>; Jennifer King and Adriana Stephan. Regulating Dark Patterns in Practice – Applying the California Privacy Rights Act. *Georgetown Technology and Law Review*. 5 Geo. L. Tech. Rev. 251 (2021).

My interest in dark patterns as a research area began with my study of privacy policies and other forms of online disclosures, where I investigated consumer comprehension of policies and disclosures in online and mobile environments, and related issues regarding their design, framing, placement, and content. Based on my research experience, I have consulted as an expert witness on numerous cases related to dark patterns and deceptive design choices since 2009. I have given multiple public presentations on the topic of dark patterns (including participating in a FTC public workshop on the topic), consulted with the California Attorney General's office regarding the use of dark patterns in connection with its landmark privacy law, the California Consumer Privacy Act, and published a law review article on issues related to regulating dark patterns (included in my CV). As of December 2021, along with colleagues at Stanford University's Digital Civil Society Lab, I co-direct the Dark Patterns Tip Line, located at: <https://darkpatternstipline.org/>. This website is an online resource that continues to expand using submissions of dark patterns from the public.

Attached to this report as Appendix I is my current Curriculum Vitae (CV) with a list of all of my publications, and a list of all of the cases in which I have testified as an expert at trial or by deposition in the past decade under "Litigation Consulting" under Appendix II.

### 3. Overview of Method

The method I used to evaluate this matter and form my expert conclusions and opinions are based primarily upon my academic and professional training in Human-Computer Interaction (HCI), original research, and review of related work by other academics and professionals. In this section, I will provide an overview of HCI, the methods I used to render my conclusions and opinions, and specific details about the topic of “dark patterns” and why dark patterns are relevant to this case.

To form my conclusions and opinions in this matter, I conducted my research process as follows:

1. Reviewed amended complaint filed by the FTC.
2. Reviewed screen captures and screenshots of the cancellation flow, public-facing Frequently Asked Questions (FAQ) and other screen captures from Match.com, performed a heuristic analysis, and formed conclusions regarding questions of consumer confusion.
3. Reviewed internal company documents discussing the cancellation flow.

I employed two researchers to assist me with my research and analysis in this matter. I am being compensated at a rate of \$450/hr. My compensation in this matter is not contingent on my findings.

#### A. Introduction to Human-Computer Interaction

Human-Computer Interaction, or HCI, is the study of how humans engage with computer interfaces. HCI is rooted in the field of human factors and ergonomics, which studies how humans interact with the physical world in order to improve the effectiveness, safety, and usability of specialized machines. With the advent of computers, HCI emerged as a field distinct from the study of human factors. In its early days, HCI research was still closely tied to human factors, focusing on the physical aspects of computer use, such as the shape of a keyboard or mouse. After

command-line interfaces gave way to graphical displays, the field expanded to include a range of topics relating to the visual aspects of computer displays, from human visual perception (how the eye processes sensory data) to human cognition (how the brain interprets and classifies information). As this range suggests, HCI is a broad interdisciplinary field that can include experts from a number of university departments, including computer science, engineering, linguistics, psychology, and information science.<sup>5</sup>

In addition to being an academic field, HCI is also an applied discipline with a strong presence in the private sector. Practitioners drive advances in HCI as much as—if not more than in some areas—academics do, and leading journals such as the *Journal of Usability Studies* and conferences such as ACM SIGCHI (Conference on Human Factors in Computing Systems)<sup>6</sup> publish work from both private sector practitioners and academics. Many major technology companies employ in-house HCI practitioners, often with titles such as User Experience Designer, Developer, or Researcher, who collaborate with visual designers to develop software and website interfaces. These practitioners are an integral part of the design and development process, and large technology companies typically will not launch online and software products until HCI practitioners have evaluated them. Companies also seek advice from independent HCI consultants.

HCI findings are typically derived from data gathered using both quantitative and qualitative methods, such as: usability inspections, usability tests, focus groups, interviews, examinations of customer feedback (both solicited and unsolicited, e.g., through customer complaints), and other

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<sup>5</sup> <https://uxpajournal.org/>

<sup>6</sup> <https://chi2023.acm.org/>

methods. HCI research has yielded several principles of usability—or heuristics—as well as more domain-specific guidelines that can be applied to evaluate any interface. These principles are important tools for HCI practitioners tasked with evaluating software applications. By evaluating Internet content according to these principles (also called a “usability inspection”)—that is, reviewing an application interface for compliance with an accepted set of heuristics—HCI experts can identify common usability problems in an interface. Many of these principles are based on “user-centered design,” a concept originated in Don Norman’s foundational text *The Design of Everyday Things*, that is employed internationally and embraced by leading websites, design consultants, and user experience/usability professionals<sup>7</sup>. Through a variety of methods, user-centered design seeks to understand application and interface design from the customer’s (user’s) point of view.

## B. Heuristic Analysis Methods

In this case, I used a heuristic evaluation (also called a usability inspection) to evaluate the Match.com interface for conformity with canonical heuristic guidelines and principles created by both academic researchers and professionals (citations made throughout as applied). A heuristic evaluation is made based on HCI principles derived from empirical research and involves the review of a user interface specifically for compliance with these principles, from a visual and information design perspective, as well as assessing the design of the interface and reviewing specific tasks from the user’s perspective.<sup>8</sup> This approach can provide similar insights to those generated through user testing without the recruitment of participants. Usability inspections can

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<sup>7</sup> Don Norman, *The Design of Everyday Things*, Basic Books (1988).

<sup>8</sup> Agnes Deneka, *Usability Inspection Methods*, Trimble (April 15, 2021), <https://modus.trimble.com/news/2021-04-15-usability-inspection-methods/>

be used to examine interfaces prior to launching, or existing interfaces for flaws after they have been launched and put into use, particularly when user feedback or additional testing has identified potential problems. In this report, I limit my analysis to the design of the Match.com subscription cancellation flow within the date ranges of the evidence provided to me (2016 through 2022).

Leading researchers in the field, such as Jakob Nielsen, Ph.D., Professor Ben Schneiderman, Ph.D., Donald Norman, Ph.D., and Bruce Tognazzini have distilled the most fundamental usability principles, for example: “The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.”<sup>9</sup> They have also created sets of guidelines that address web design at a more granular level, for example, because people typically scan webpages in an “F-shaped” pattern, it is best to design content in a predictable, easily scannable way to enhance easy readability by using “information-carrying” words and stating the most important information first.<sup>10</sup> This inverted-pyramid method better sustains readership by fronting the most necessary details where users are most likely to see and engage them.<sup>11,12</sup> This report is informed by decades of usability testing and design evaluations conducted by cognitive psychologists and HCI experts.

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<sup>9</sup> Jakob Nielsen, 10 Usability Heuristics for User Interface Design, Nielsen Norman Group (updated Nov. 15, 2020), <https://www.nngroup.com/articles/ten-usability-heuristics/>; see also Heuristic Evaluations and Expert Reviews, Usability.gov, <https://www.usability.gov/how-to-and-tools/methods/heuristic-evaluation.html>.

<sup>10</sup> <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content-discovered/>

<sup>11</sup> University of Maryland, Baltimore. UMB Website Manual, Best Practices for Web Writing. <https://www.umb.edu/cpa/toolbox/website-manual/prepare/web-writing/#:~:text=It's%20a%20writing%20style%20where,few%20sentences%20or%20bullet%20points.>

<sup>12</sup> Jakob Nielsen, Inverted Pyramids in Cyberspace, Nielsen Norman Group (updated 2015).

<https://www.nngroup.com/articles/inverted-pyramids-in-cyberspace/>



My analysis of the Match.com cancellation flow focuses on the following aspects most relevant to a usability inspection of disclosures or other information communicated to users by an interface:

- Placement and prominence: A key issue for evaluating whether an individual design feature is effective is its placement on the screen in relation to other elements (e.g., where is it in the visual hierarchy),<sup>13</sup> as well as how prominent it is (e.g. whether it competes with other objects on the screen).<sup>14</sup> Prominence refers to how conspicuous a design feature is in relation to other textual and graphical elements on the page, as well as the grouping and alignment of the items, which provide a visual flow for the user to follow.<sup>15</sup>
- Appearance: Appearance refers to the visual elements of the disclosure, such as font selection, text size, and color.<sup>16</sup> In conjunction with placement and prominence, these elements influence how conspicuous a design element is to the user.
- User Flow Architecture: In order to understand the context in which a choice is presented and the resulting decision(s) a user must make, it is necessary to document the flow, i.e., the steps one must take through the application to arrive at a decision point, and the options available to the user after making a specific choice. By documenting these paths, one can discover potential flaws in how information is presented to users, as well as gain insight into why users take particular actions.<sup>17</sup>

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<sup>13</sup> Jeff Johnson, *Designing with the Mind in Mind: Simple Guide to Understanding User Interface Design Guidelines* 2nd Edition (Morgan Kaufmann; 2nd edition (February 24, 2014).

<sup>14</sup> Jenifer Tidwell, Charles Brewer, and Aynne Valencia. *Designing Interfaces, 3rd Edition* (O'Reilly 2019).

<sup>15</sup> *Id.*

<sup>16</sup> Jakob Nielsen *et al.*, *Prioritizing Web Usability* (New Riders 2006).

<sup>17</sup> Louis Rosenfeld *et al.*, *Information Architecture for the Web and Beyond* (O'Reilly 2015).

- System status and feedback: Documenting what the application is telling the user about what is currently happening within the application and what occurs after she makes a decision is crucial for determining if the users understand where they are in a flow, and what their options are.<sup>18</sup> The system status includes task interruptions: instances where the user is interrupted from their primary goal to attend to a completely different task.<sup>19</sup>
- Terminology/Content Strategy: The terms used to communicate choices, system status, and feedback to the users are important for helping them understand system functions. Clear, consistent terminology is essential to user understanding. When there is a mismatch between the terms used by the application and those understood by the users, confusion can result.<sup>20</sup>
- Readability: Users generally scan online text rather than read it thoroughly, and this is particularly true with long paragraphs of text. According to Nielsen, “dense blocks of text are a major turn-off for Web users,” suggesting to users that they will have to “work hard to extract the information they want.”<sup>21</sup>
- Friction: Design friction refers to “interactions that inhibit people from intuitively and painlessly achieving their goals within a digital interface.”<sup>22</sup> A common outcome of design friction is the user exiting or abandoning the task in frustration or confusion. While there are instances of friction that help users, these cases are largely centered around interventions and systems that encourage mindful behavioral change (e.g. keeping a diet

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<sup>18</sup> Nielsen, 10 Usability Heuristics, *supra*; Johnson, *supra* at 131.

<sup>19</sup> Michael Albers, Human-Information Interaction and Technical Communication: Concepts and Frameworks (IGI Global 2012).

<sup>20</sup> Johnson, *supra* at 131.

<sup>21</sup> Nielsen, *Prioritizing Web Usability*, *supra*.

<sup>22</sup> Victoria Young, Strategic UX: The art of reducing friction. *InfoDesign* (February 13, 2015)

journal).<sup>23</sup> These examples *do not* forgo the principles listed above or hinder users from completing desired tasks. A designer should aim to *reduce* friction that hinders users from completing desired tasks or causes users to abandon the task (or system) entirely.

The research literature demonstrates that all of these usability aspects—placement, prominence, and appearance—are critical to the effective disclosure of information. These concepts are tied to the visual hierarchy and layout of both graphical and textual elements in an interface. As Tidwell phrases it, “the most important content should stand out the most, and the least important should stand out the least.”<sup>24</sup> The point at which a design element is placed in the user flow has a direct impact on whether it is viewed and acted upon. The feedback the system provides to the user about what state the system is currently in, and what the user’s options are, has a direct effect on the user’s comprehension of a design feature and the actions they can or cannot take as a result. The terminology used to describe an action, as well as its readability on-screen, also impact whether its presentation is effective. Finally, a user interface must minimize (or eliminate) unnecessary friction that prevents the user from achieving her goals. The interface should strike a balance, allowing the user to complete their tasks easily and efficiently while minimizing room for user error.

### C. “Dark” Design Patterns

“Dark” design patterns (also called manipulative or deceptive design patterns) are design features that deceive, coerce, or manipulate users into making choices that are either not what users

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<sup>23</sup> Anna L. Cox et al. Design Frictions for Mindful Interactions: The Case for Microboundaries. In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems (CHI EA '16). Association for Computing Machinery, New York, NY, USA, 1389–1397. <https://doi.org/10.1145/2851581.2892410>

<sup>24</sup> Tidwell, *supra*.

intended, or are not in their best interests. This report analyzes whether the design of Match.com’s cancellation flow used dark design patterns.

As background, in the visual design literature, design patterns are “reusable/recurring components which designers use to solve common problems in user interface (UI) design,” such as navigation menus for webpages or mobile devices.<sup>25</sup> Architect Christopher Alexander characterizes design patterns as well-verified solutions to recurring problems that are *replicable* and *adaptable* to each designer’s case, preferences, and local problem conditions.<sup>26, 27</sup> Design patterns are helpful hallmarks for designers in answering problems quickly and efficiently; however, some variants of these patterns routinely work against users’ interests. Design patterns are adopted as best practices based on results from user research and practitioner experience, with an expectation that they represent a benefit to the user, in terms of efficiency, minimal cognitive burden, or simplicity. Online interfaces should *reduce* users’ cognitive load: “the amount of mental resources that is required to operate the system.”<sup>28</sup> This might be accomplished by designing based on existing mental models, design layouts, and labeling; or minimizing unhelpful text, images and links. Thoughtful design reduces unnecessary friction, thus minimizing the amount of energy users have expend on a task.

Dark patterns are similar sets of recurring design components but are instead optimized for the benefit of the designer, usually at the direct expense of the user, most commonly in terms of user

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<sup>25</sup> User Interface (UI) Design Patterns, Interaction Design Found., <https://www.interaction-design.org/literature/topics/ui-design-patterns/>.

<sup>26</sup> Christopher Alexander, *A Pattern Language: Towns, Buildings, Construction*. Oxford University Press. (1977).

<sup>27</sup> <https://www.designsystems.com/christopher-alexander-the-father-of-pattern-language/>

<sup>28</sup> Kathryn Whitenton, *Minimize Cognitive Load to Maximize Usability*. (December 22, 2013). <https://www.nngroup.com/articles/minimize-cognitive-load/>

financial loss or an unwanted expenditure of the user’s money.<sup>29</sup> Dark patterns may also require or coerce users to disclose more personal information (violate privacy) or spend more attention or time (maximize engagement) on a website or feature than users would ideally desire. The term “dark patterns” was popularly coined in 2010 by designer Harry Brignull, who described them as “tricks used in websites and apps that make you do things that you didn’t mean to, like buying or signing up for something.”<sup>30</sup> More recently, Mathur *et al.* defined dark patterns as user interface design choices that benefit an online service by coercing, manipulating, or deceiving users into making unintended and potentially harmful decisions.<sup>31</sup> An emerging literature has grown around cataloging deceptive retail practices in e-commerce and documenting dark patterns across additional contexts, such as privacy and online video gaming.<sup>32</sup> In recent years, Harry Brignull has opted for the term “deceptive design patterns,” emphasizing the routine manipulation at play. These mechanisms can be *replicated* by several online services and *adapted* into their user flows, depending on the goal of deception. “Dark patterns” or “deceptive design patterns” routinely hinder users’ goals and undermine their choices or individual agency. Collections of examples are available at [Deceptive.design](https://deceptive.design/)<sup>33</sup>, Professor Colin Gray’s [UXP<sup>2</sup> Lab website](https://darkpatterns.uxp2.com/)<sup>34</sup>, and the [Dark Patterns Tip Line](https://www.darkpatternstipline.org)<sup>35</sup>, the crowdsourced website that I co-manage.

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<sup>29</sup> While “designers” (e.g., visual designers or engineers) may be the individuals who actually implement dark patterns in practice, the term is a proxy for whomever or whatever is benefitting from their use. For a discussion of the user’s best interest see Gray 2018. Also, see generally: <https://darkpatterns.uxp2.com/>.

<sup>30</sup> Harry Brignull, What are Dark Patterns?, Dark Patterns, <https://deceptive.design/>.

<sup>31</sup> See: Mathur 2019, 2021.

<sup>32</sup> Mathur 2019.

<sup>33</sup> <https://deceptive.design/>

<sup>34</sup> <https://darkpatterns.uxp2.com/>

<sup>35</sup> <https://www.darkpatternstipline.org>

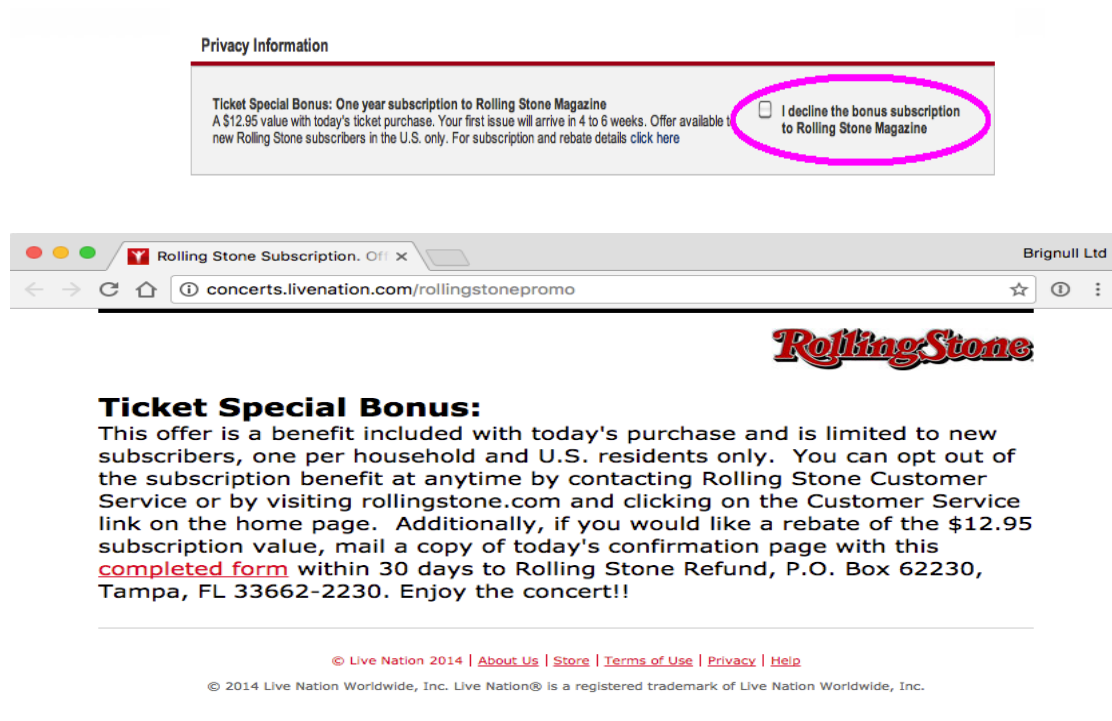
While dark patterns can be (and often are) intentionally designed to achieve their outcomes, classifying a design pattern as “dark” or “deceptive” does not require proving a designer’s or company’s intent to deceive, coerce, or manipulate the user. It is possible to unintentionally create a dark pattern through poor or sloppy design choices or by not testing or evaluating a design pattern either prior or after launch. Inexperience, or lack of familiarity with established design principles and heuristics can also exacerbate the problem. As such, this report identifies several dark patterns in Match.com’s service and cancellation flow, including:

- Roach Motel: Brignull describes the “roach motel” as when “the design makes it very easy for you to get into a certain situation, but then makes it hard for you to get out of it (e.g. a subscription).”<sup>36</sup> Examples of the “roach motel” pattern include requiring customers to cancel “opt out” subscriptions that were billed to them as a default option, as well as the general disproportionality of making canceling a subscription more difficult than signing up for one, often by requiring the customer to call or online chat with a customer service agent instead of providing a simple online option. Match.com attracts users to their subscription services with Guarantee Extensions and emails from “interested” users.<sup>37</sup> But, as this report discusses, canceling a subscription proves to be a lengthy process, including extraneous steps, such as a password authentication step and multiple pages of survey questions: this process can take *eight* steps.

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<sup>36</sup> Brignull, *supra*.

<sup>37</sup> This fails to differentiate legitimate and fraudulent communications (users who are under review for fake profiles, soliciting, etc.).



**Figure 1: Example of Rolling Stone’s 2014 “Roach Motel” Subscription**

### **Cancellation Process<sup>38</sup>**

- Hidden Information: Match.com frequently hides or fails to disclose relevant information to users. For example, the survey included in the cancellation process is actually optional: it is possible for users to click through the entire process and cancel without providing answers. However, this fact is *never stated* during the cancellation process, nor are users asked if they want to complete the survey. Moreover, statements such as “Tell us more,”

<sup>38</sup> Brignull, *supra*.

and “Before you go, help us make Match.com better” lead users to believe the survey is compulsory.

These patterns are classified under a range of strategies identified to harm or deceive users.<sup>39</sup>

“Roach Motel” is an *obstruction* strategy which makes user tasks more difficult than necessary by adding extraneous barriers and excess friction, such as a password authentication step and surveys.

“Hidden Information” is an *interface interference* strategy which visually manipulates the interface to reduce discoverability of user-desired options. Finally, “Forced Continuity” is a *sneaking* strategy, intended to delay discovery of important information (including information that would cause users to revoke service if presented earlier).

In addition to the questions of conformance to design heuristics described earlier, this report’s analysis draws upon the empirical research literature on dark patterns. This report is framed in this way because while dark patterns do often violate design heuristics, they are not simply isolated issues of poor design by a single company; instead, they fit into the larger instance of dark patterns emerging across multiple sectors of e-commerce companies.<sup>40</sup> However, the mere fact that multiple companies have engaged in this form of deceptive design does not validate its use or diminish its negative effects on users.

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<sup>39</sup> Id.

<sup>40</sup> See generally: Caroline Sindere and Sebastian Rieger, Policy Brief: Dark Patterns - Regulating Digital Design, Stiftung Neue Verantwortung (May 13, 2020), <https://www.stiftung-nv.de/en/publication/dark-patterns-regulating-digital-design/>.



## 4. Heuristic Analysis of Match.com's Cancellation Flow

This section presents the findings of my heuristic analysis of Match.com's cancellation flow. As introduced in Section 3, a heuristic analysis is an expert review of an interface for conformance with principles of usability and visual design, as well as an assessment from the user's perspective.<sup>41</sup> I start with a descriptive overview of the Match.com cancellation flow for the three dates for which I was provided evidence: 2016, 2019, and 2020, using 2016 as the starting point, and then contrasting that flow with changes introduced in the following years. Next, I describe my findings from the heuristic analysis. I first analyzed the cancellation flow for its conformance with canonical principles of usability and design. I discuss the areas in which I found the flow violated these principles, as well as practitioner design norms (*e.g.*, common best practices for subscription cancellations). Next, I discuss the specific forms of dark patterns I identified in the cancellation flow. Dark patterns are design patterns that violate principles of usability by taking advantage of common biases in human decision-making to manipulate, mislead, confuse, or deceive users. Relatedly, as mentioned earlier in this report, some instances of dark patterns also can include unnecessary or arduous friction into a design pattern and into a design process. Similar to legitimate design patterns, dark patterns have evolved through their adoption and use by companies and designers to become reusable design components or techniques that create decisional interference that benefits the company or designer at the expense of the user. I found multiple examples of dark patterns in the cancellation flow.

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<sup>41</sup> Jakob Nielsen, How to Conduct a Heuristic Evaluation, Nielsen Norman Group (Nov. 1, 1994), <https://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation/>.

Part of what makes a dark pattern a dark pattern is its subversion of design patterns; design patterns are “are reusable/recurring components which designers use to solve common problems in user interface design. For example, the breadcrumbs design pattern lets users retrace their steps.”<sup>42</sup> Designers can apply them to a broad range of cases, but must adapt each to the specific context of use.<sup>43</sup> Design patterns are a part of the online digital commons; users are taught through the repeated use of design patterns to build a mental model of how a product functions. It’s the subversion of users’ expectations with respect to these common design patterns that creates confusion, manipulation, and deception (*i.e.*, dark patterns).

I conclude this section with a summary of these findings and how they work to create a confusing and friction-filled experience for customers. I also examine supporting documentation from Match.com employees discussing issues with the cancellation provided to me by the FTC.

## A. Overview of Match.com Cancellation Process

The FTC’s amended complaint alleges that Match.com has used a “confusing and cumbersome cancellation process that causes consumers to believe they have canceled their subscriptions when they have not” since at least 2013.<sup>44,45</sup> For my analysis I was provided with recordings and screenshots of the cancellation process from the years 2016, 2019, and 2022. In this section, I will

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<sup>42</sup> Breadcrumbs are “a list of links representing the current page and its “ancestors” (parent page, grandparent page, and so on), typically going all the way back to the site homepage.” <https://www.nngroup.com/articles/breadcrumbs/>

<sup>43</sup> <https://www.interaction-design.org/literature/topics/ui-design-patterns>

<sup>44</sup> First Amended Complaint, p. 2.

<sup>45</sup> From images in the file MATCHFTC703998, it appears that the cancellation flow screens have been static since at least 2011 based on dates that appear on some screenshots in the file, but given the poor resolution of the images in this file we cannot use it for detailed analysis.

provide an overview of the cancellation process starting in 2016, and then highlight the changes I observed in 2019 and 2022, calling out the specific concerns I have regarding aspects of the cancellation process that could cause customer confusion. Confusion can manifest in many ways, such as customers abandoning the cancellation process before completion, customers misunderstanding the cancellation process and failing to complete it, and customers who seek other means by which to cancel their accounts due to frustrations with the process.<sup>46</sup> I must note that it appears that the evidence that I have been provided reflects users who had subscribed accounts (rather than customers with free accounts), meaning that there may be steps or menu items that are different for free/non-subscribed users across all three versions I reviewed. All of the evidence I reviewed appeared to be collected on a desktop or laptop computer running Windows; I was not asked to review the cancellation process on a mobile device or operating system, nor to offer an opinion about these processes on mobile devices.

All told, from the initiation step (selecting settings) to the confirmation page, this process typically takes the user at least eight steps:

1. Select Settings icon/click “Settings” link from drop-down menu from Match.com universal site header
2. Land: Account Settings page. Select “Change/Cancel Membership” link.
3. Land: Password entry screen. Enter password and click “Continue Cancellation” button.
4. Land: Page 1 of cancellation flow: Click “Cancel Subscription” from subscription options page.
5. Land: Page 2 of cancellation flow: Survey page S1; click “Continue Cancellation” button.
6. Land: Page 3 of cancellation flow: Retention offer; click “No thanks, I want to resign.”<sup>47</sup>
7. Land: Page 4 of cancellation flow: Survey page S2; click “Continue Cancellation” button.

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<sup>46</sup> Per screenshots provided to me by the FTC, as well as document MATCHFTC703998, other pathways appear to include online chat (within a specific time window) with a customer service agent, or email correspondence.

<sup>47</sup> It appears that some users may have not received the retention offer page depending upon which survey answer they clicked (i.e., “I met someone”). However, I do not have enough evidence to reliably determine how frequently that occurred.

8. Land: Page 5 of cancellation flow: Cancellation confirmation page.<sup>48</sup>

**Table 1: Primary steps in the 2016 Match.com Cancellation Process.**

To be clear, these steps do not include any additional tasks presented to users, such as answering all of the survey questions on Pages 2 and 4.

### I. 2016 Cancellation Process

The first screen recording of the process provided to me is MATCHFTC761906.mp4, which based on copyright notices viewable on the capture appears to have been recorded in 2016. While some aspects of the site design have changed over time, the core navigation appears to be similar across the years: presumably, accessible from most pages of the website, the universal site header contains an account settings icon (shaped like a gear). When clicked, a submenu appears that contains a link to “Settings;” when clicked, the “Settings” link takes the user to a page entitled “Account Settings.” This page consists of eleven account settings-related links, listed in alphabetical order, as well as navigation “breadcrumbs” viewable at the top of the page beneath the main navigation banner and the native ad banner that indicate which page of the Account Settings one was visiting, which is consistent through the remainder of the flow.

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<sup>48</sup> In MATCHFTC703998, which appears to be a guide for customer service agents dated 11/10/2015, the cancellation process is documented as taking 11 steps.

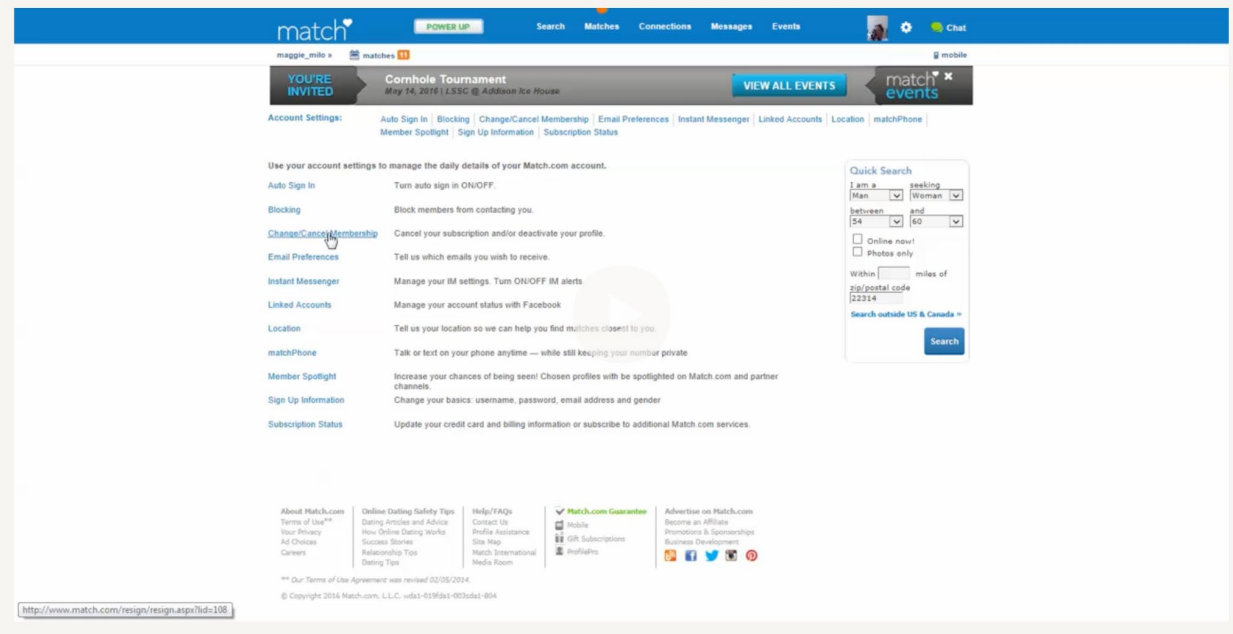
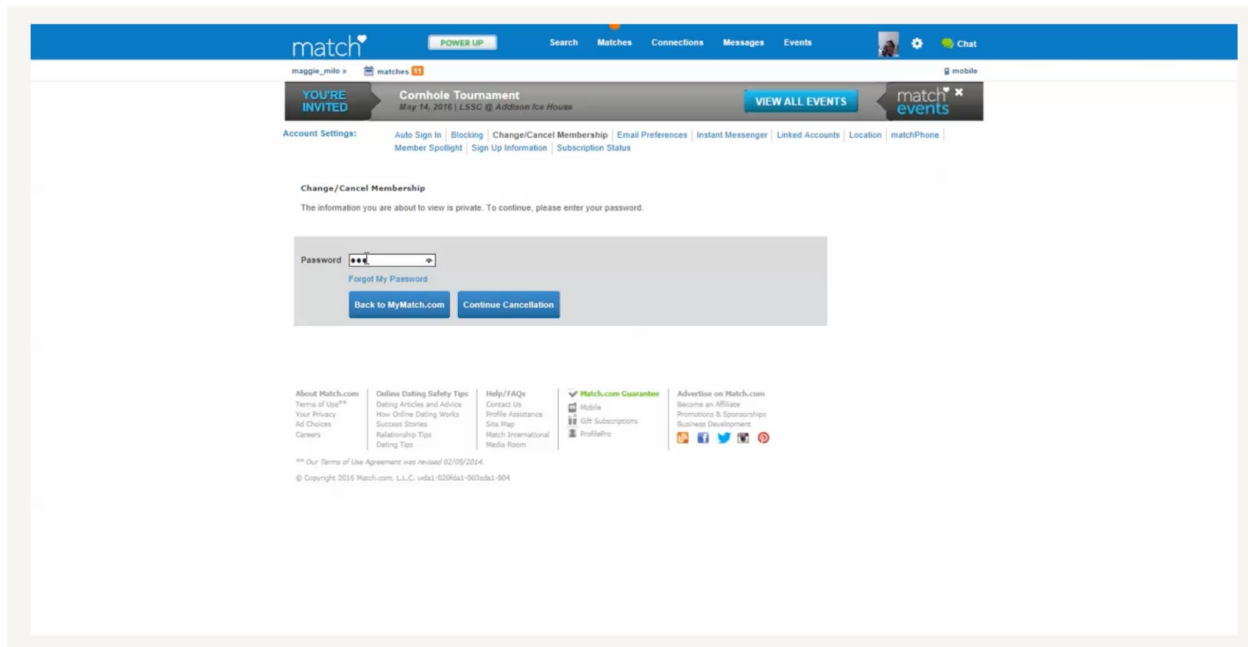


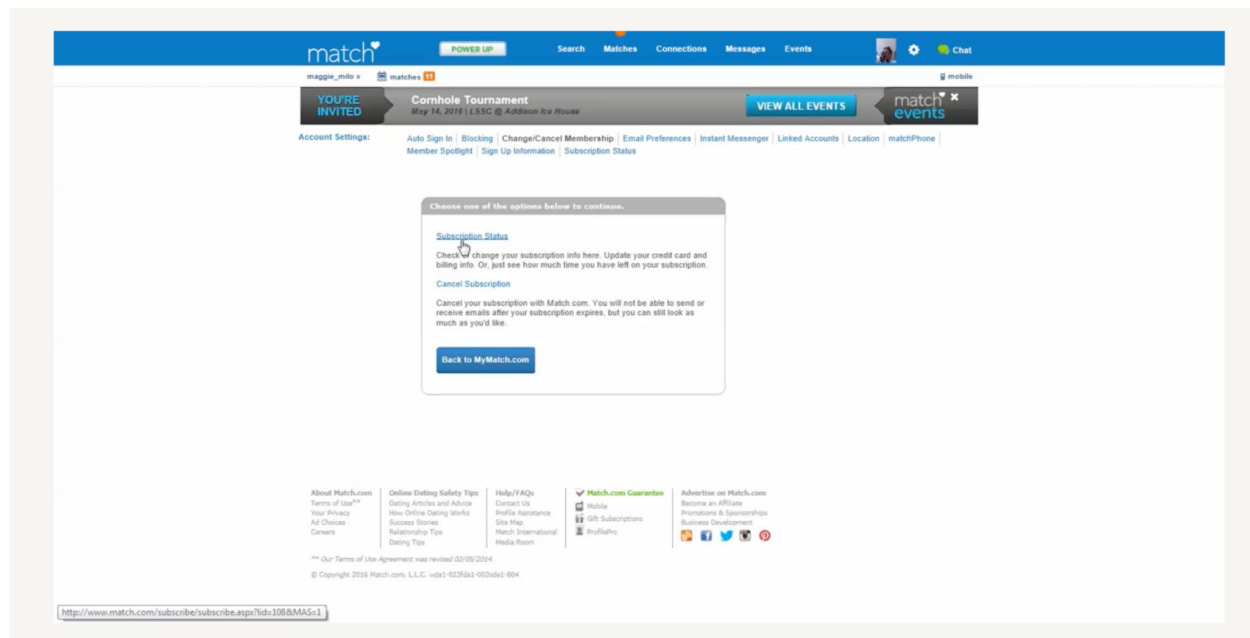
Figure 2: 2016 Account Settings Page

On this page, one first can access the “Change/Cancel Membership” link (third item in the list), with the text “Cancel your subscription and/or deactivate your profile,” which initiates the cancellation flow. After locating the link, when clicked, the user is shown a password entry screen, which requires the user to enter her password before proceeding in the cancellation flow.



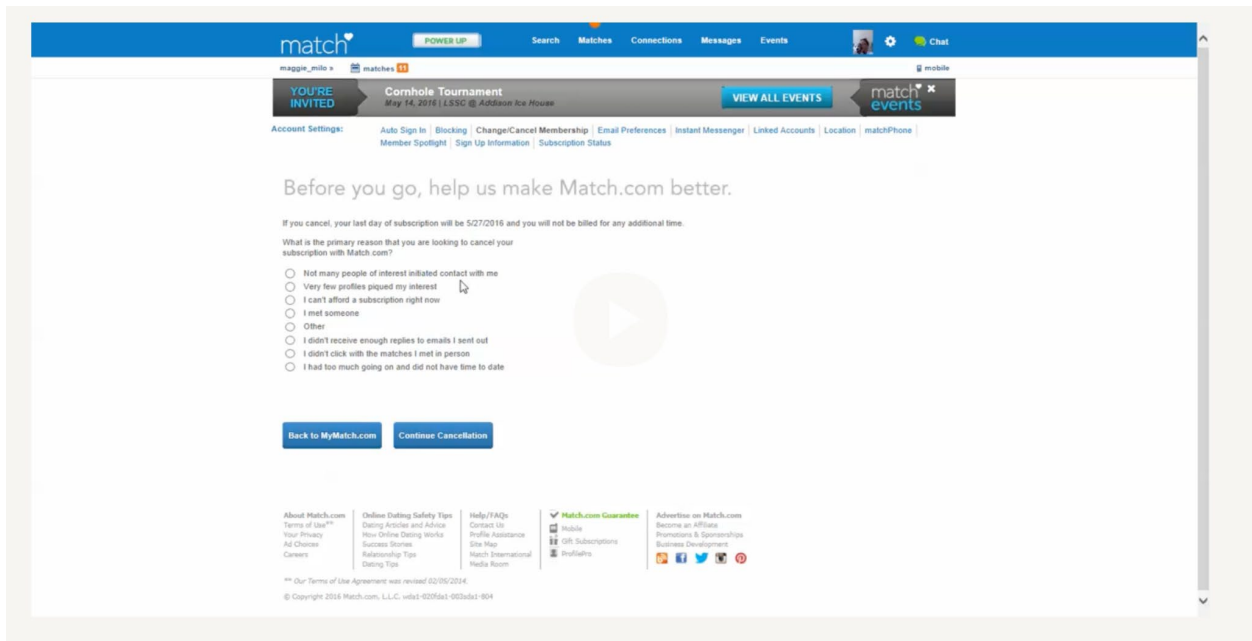
**Figure 3: 2016 Password Authentication Page**

The breadcrumbs update to show the “Change/Cancel Membership” link in a non-selectable state to indicate which portion of Account Settings the user is presently visiting. If the user successfully enters her password, she then lands on the first page (Page 1) of the cancellation flow: a subscription options page with three choices: “Subscription Status,” “Cancel Subscription” or “Back to MyMatch.com” This page features the first instance of a dark pattern that persists into the 2022 cancellation flow: only the “Back to MyMatch.com” link is rendered as a button, with the same blue button styling present throughout the rest of the cancellation flow. The “Subscription Status” and “Cancel Subscription” links are rendered as blue hyperlinks in text above; their lack of button design makes it harder to spot the “Subscription Status” and “Cancel Subscription” choices.



**Figure 4: Page 1 of the 2016 Cancellation Flow**

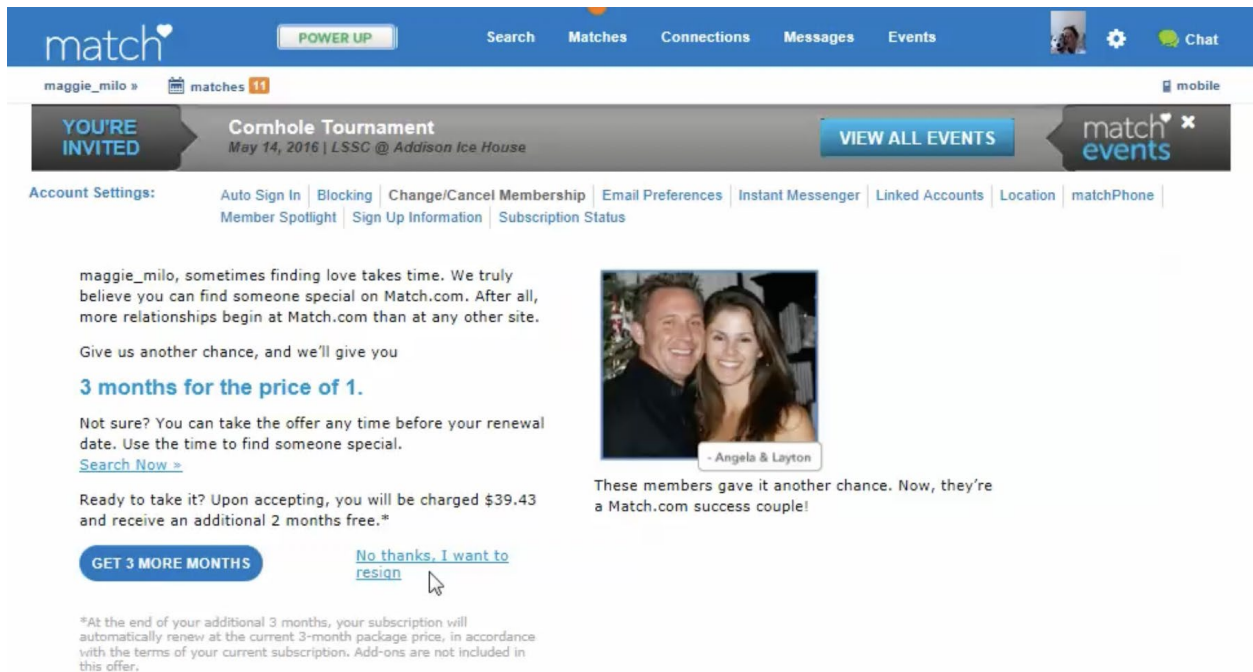
If the user identifies “Cancel Subscription” as a clickable element and clicks it, she then lands on Page 2 of the flow, which features a survey question beneath the headline, “Before you go, help us make Match.com better.” There are eight survey answer options on this page, selectable with a radio button. The survey answers are not indicated as optional, though it is possible based on actions documented in Match Cancellation Process\_10-12-2022.wmv that one can simply ignore the survey questions and proceed with the cancellation by clicking the “Continue Cancellation” button beneath the survey answers, which I will discuss later. Selecting any of the answers will auto-generate between one to two additional survey questions, again presented with radio buttons and not indicated as optional, for a minimum of at least four throughout the entire survey portion. Beneath the survey answer options are two buttons, each blue, the left button labeled “Back to MyMatch.com,” the right labeled “Continue Cancellation.”



**Figure 5: Page 2 of the 2016 Cancellation Flow**

Once the user clicks the “Continue Cancellation” button, she is taken to Page 3 of the flow, a marketing page, where the user is given a retention offer. In the 2016 version, the options at this stage were “GET 3 MORE MONTHS” (displayed as a blue clickable button) or “No thanks, I want to resign” displayed as a blue text hyperlink. Notably, this button differs from the other buttons in the flow both in shape (oval, versus rectangular), styling (a different, new shade of blue for the background, the shadow which gave the previous button a more ‘3D’ or physical feel is now removed, and a new font style and new darker color for the font and text is also used) and in labeling (using all-caps instead of lowercase). There is also no headline on this page. In order to proceed with cancellation, the user must click the “resign” hyperlink, which lands on a second survey page, entitled “Tell us more.” I will discuss the issues with these inconsistencies and the use of the hyperlink below.





**Figure 6: Page 3 of the 2016 Cancellation Flow.**

On the 2016 version of this next page, the user is presented with the question “In your own words, how can we make finding love easier?,” with an open-response text box that allows for the entry of 1000 characters of text. This page now returns to the original design of the cancellation flow, with the buttons changing back to rectangular boxes, the original styling, and original wording. Beneath are two new survey questions, a write in question of “How likely is it that you would recommend Match.com to a friend?,” with a Likert-scale survey answer widget underneath it, numbered 1-10, with radio button selectors to pick choices on a scale from “Not Likely” to “Very Likely.” Beneath this widget, there is text informing the user of the benefits she will lose by

canceled.<sup>49</sup> Beneath this are two blue buttons, identical to the buttons on Page 2 of the flow. Clicking “Continue Cancellation” lands the user on Page 4 of the flow, the cancellation confirmation page. This page features a headline, “Your subscription has been canceled.”, provides a confirmation number for the user, and indicates the last day the user’s subscription will be active.

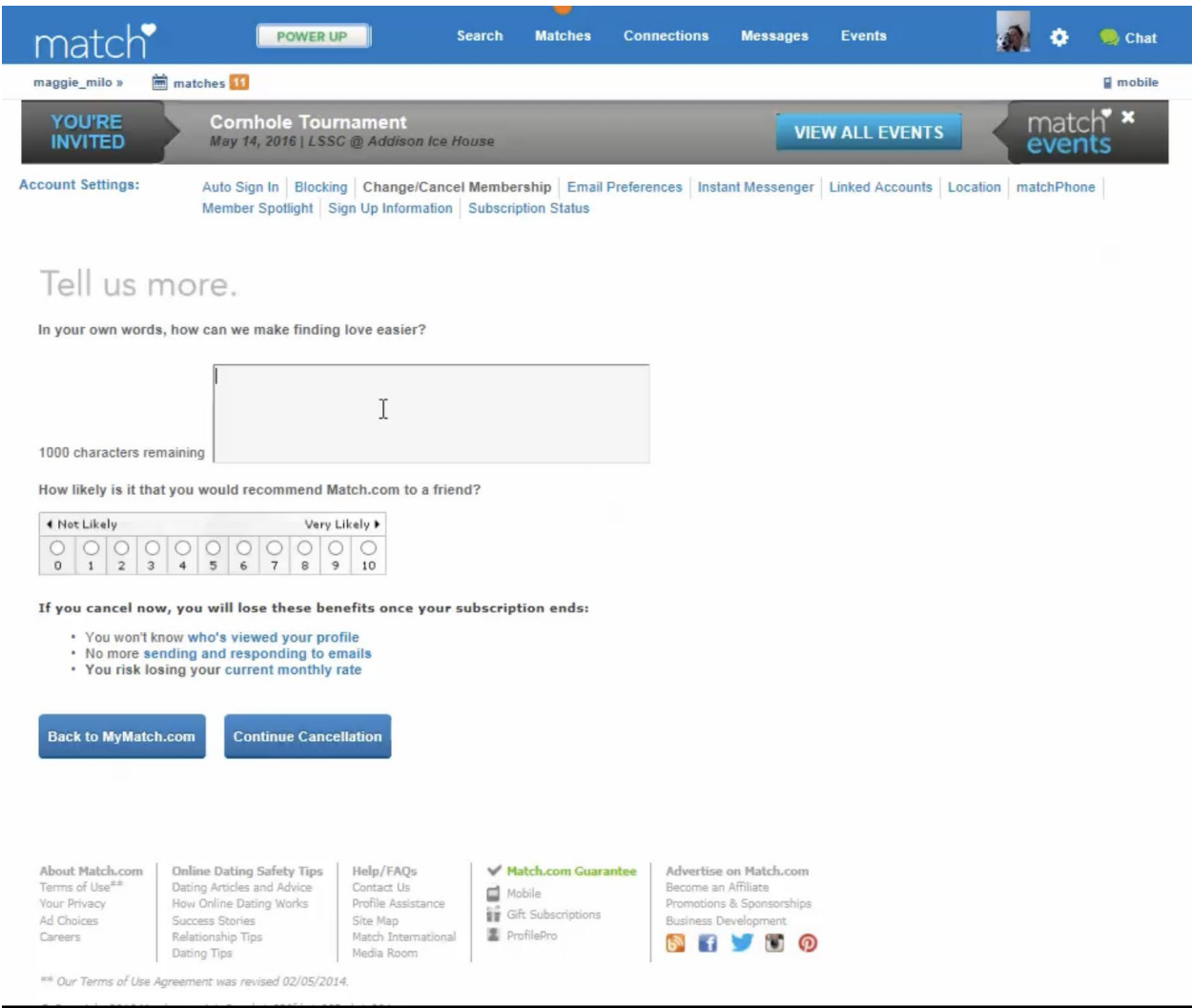
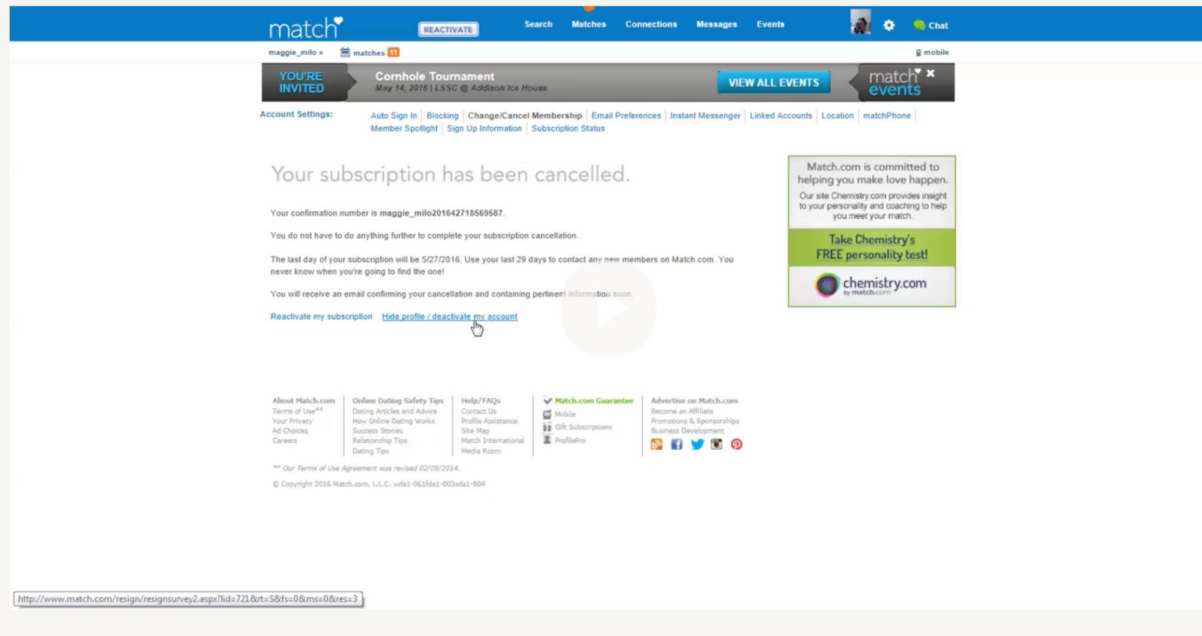


Figure 7: Page 4 of the 2016 Cancellation Flow.

<sup>49</sup> Each bullet point includes blue text that appears to be hyperlinks, but I did not see video evidence that demonstrated whether these were in fact links, and where they led if clicked.



**Figure 8: 2016 Cancellation Confirmation Page**

## II. 2019 Cancellation Process

The next version of the cancellation process for which I was provided documentation is from 2019.<sup>50</sup> In this section, I will review the substantive changes between this version and 2016; the number of primary steps from selecting Settings to the confirmation page remain the same (typically eight steps).

While the look and feel of the Match.com site was updated since 2016, the primary steps and screens remain intact with some substantive changes. The first substantive change is a redesign of Step 3, the password entry screen. While the previous version was primarily text-based and used

<sup>50</sup> MATCHFTC672309.mp4

the same blue buttons viewable later in the flow (including a “Continue Cancellation” button), the new version introduces new graphical design elements and includes a CAPTCHA widget, which if invoked by the system can add an additional step of completing the CAPTCHA image selection task. This new design element appears to obscure the Account Settings breadcrumbs (navigation elements) that are still observable on subsequent pages at the top of the page beneath the main navigation banner and the native ad banner that indicated which page of the Account Settings one was visiting.

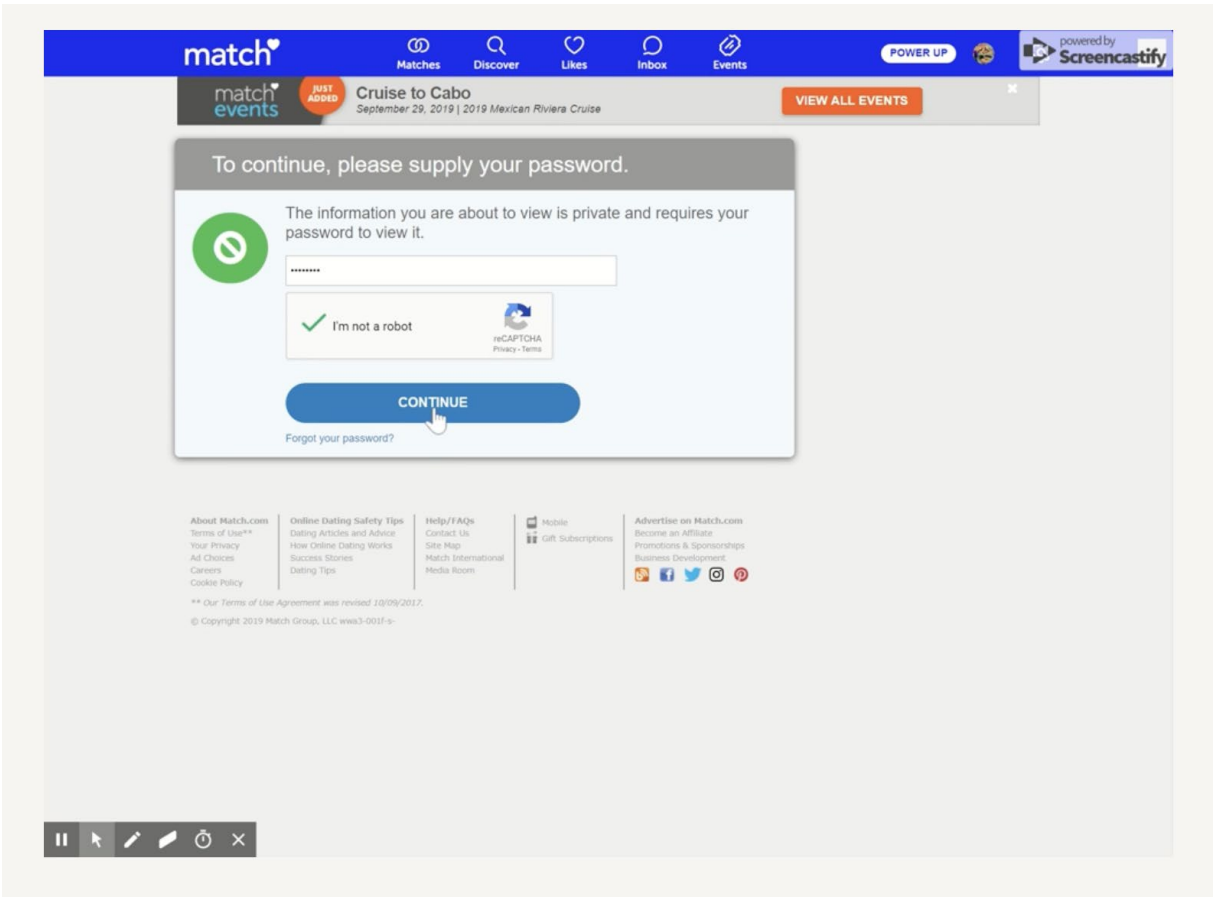


Figure 9: The 2019 Password Authentication page

The second substantive change is on Page 3 of the cancellation flow, the retention offer. Here, the “No thanks, I want to resign” text link has been replaced with a button; now, there are two buttons, the left button with the current offer (“GET 50% OFF 6 MONTHS”), and “CONTINUE CANCELLATION.” Again, as in 2016, these buttons are stylistically different from the blue buttons used elsewhere in the cancellation flow.

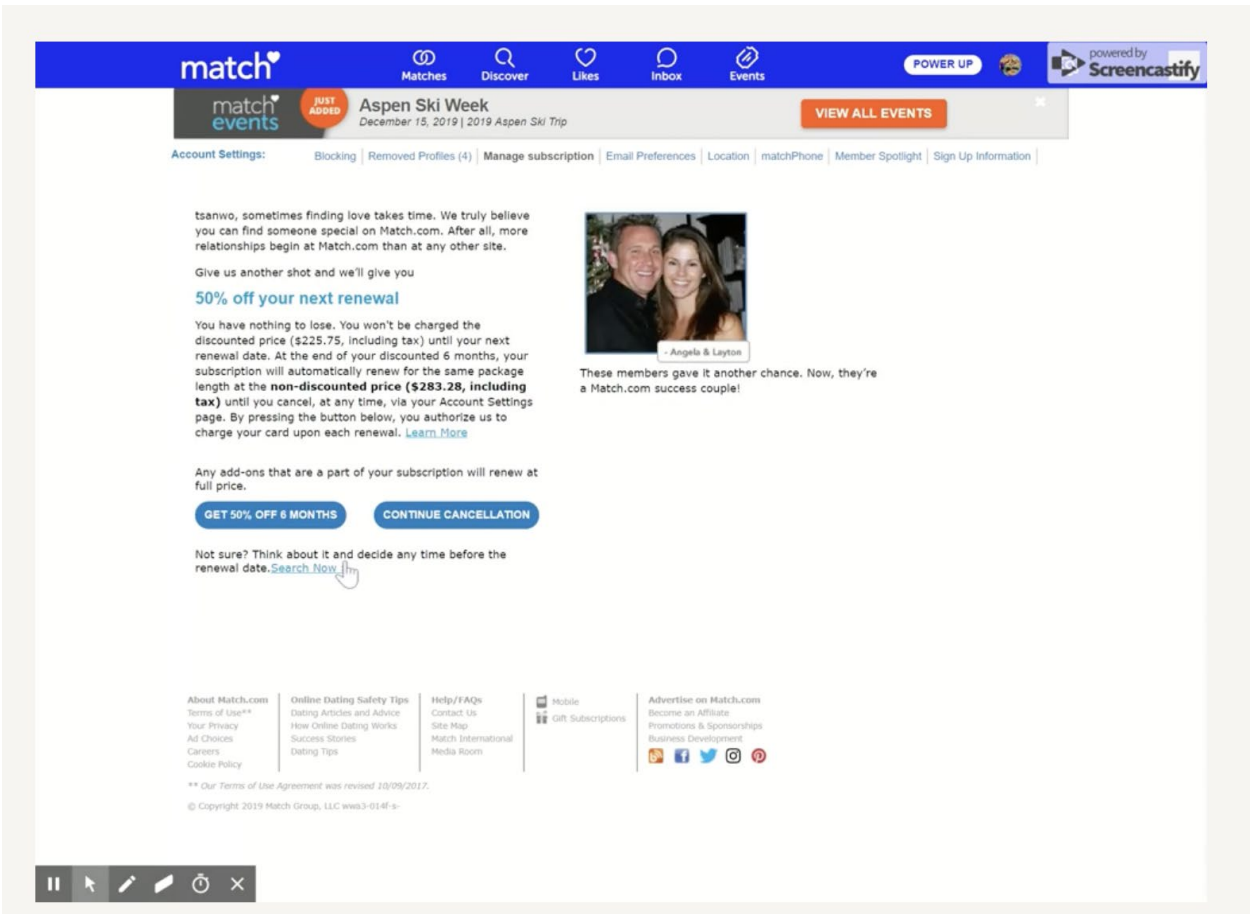


Figure 10: 2019 Retention offer page (Page 3)

The third substantive change is on Page 4 of the cancellation flow, where the “In your own words, how can we make finding love easier?” question and open-response text box have been removed, leaving the Likert-scale survey answer widget and accompanying question.

### III. 2022 Cancellation Process

The final version of the cancellation process for which I was provided documentation is dated 2022.<sup>51</sup> In this version, the Match.com website’s visual style has undergone additional updating; The Account Settings page is redesigned, with eight menu options instead of the previous eleven. The “Change/Cancel Membership” has been removed; “Manage Account” is the replacement, first in the list, with a “Manage Subscription” link beneath. The breadcrumb-style navigation has been replaced by a split-screen design with the menu options running along the left side of the screen. While these options appear to be persistent for some of the menu items, when one clicks the “Manage Subscription” link, this split-screen design disappears and subsequent pages in the flow lack either breadcrumbs or the split-screen menu items.

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<sup>51</sup>MATCHFTC672321.wmv; Match Cancellation Process\_10-12-2022.wmv.

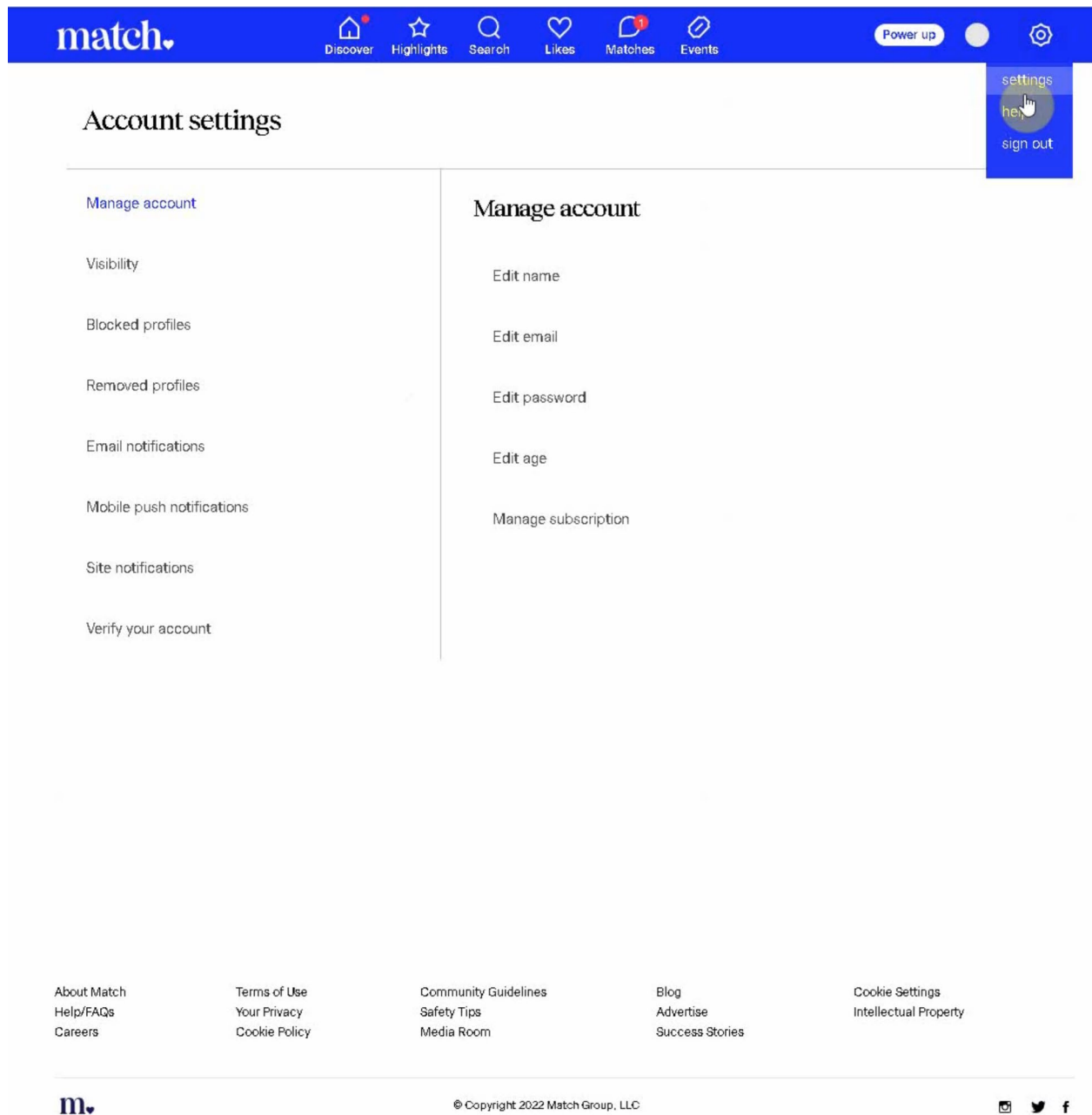


Figure 11: 2022 Account Settings page

B. Analysis of Cancellation Process

The FTC’s amended complaint alleges that the cancellation process “causes consumers to believe they have canceled their subscriptions when they have not.” Upon reviewing the multiple iterations of this cancellation process, I believe this conclusion is supported by both the website evidence and the company documents I reviewed: the cancellation process caused substantial confusion for many consumers. Additionally, I expect that some customers found the cancellation flow frustrating enough, or were stymied by the password authentication step, that they were compelled to contact Match.com’s customer service in order to cancel their subscriptions, which could add additional time or complexity to the process. In this section, I review the factors that I believe caused this confusion.

## I. Violation of Usability Heuristics

The Match.com cancellation flow across the three versions I reviewed violates several of the principles of website usability, as proposed and refined by Dr. Jakob Nielsen,<sup>52</sup> in a manner that could lead to customer confusion. The issues I review here are compounding, meaning that any single one in isolation may not have been enough to cause substantial confusion, but additively working in tandem, all contribute to a lack of clarity about how to successfully cancel one’s Match.com account.

### a. Visibility of System Status

Nielsen defines this principle as: “The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.” I observed a violation

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<sup>52</sup> Jakob Nielsen. “10 Usability Heuristics for User Interface Design.” Nielsen Norman Group, April 24, 1994 (Updated Nov. 15, 2020). <https://www.nngroup.com/articles/ten-usability-heuristics/>. Based on: Nielsen, J. (1994). Enhancing the explanatory power of usability heuristics. Proc. ACM CHI’94 Conf. (Boston, MA, April 24-28), 152-158.



of this principle in the cancellation process from a lack of consistent signaling to the user each step in the cancellation process and her present place within those steps. While the 2016 and 2019 versions use breadcrumb navigation to indicate to users that they remained in the cancellation flow throughout the process, breadcrumbs were eliminated in the 2022 version I reviewed. However, the existence of breadcrumbs alone aren't necessarily a guarantee that all users will clearly understand the current step they are in, especially given a lack of labeling of steps in the cancellation process across all versions. All versions lack a simple, clear label (e.g., "Step 3 of 5," "Page 4 of 6") indicating to users precisely where they are in the process, and this is not a problem that breadcrumbs alone can solve. The only other signal is the presence of a "Continue Cancellation" button on most, but not all, pages. The elimination of breadcrumbs from the 2022 version, coupled with a lack of discrete steps, means that a user can be several steps into the laborious cancellation process and struggle to understand what remains, or whether they are still in the cancellation process at all given its inconsistency. I will discuss this in more detail below.

b. Consistency and Standards

Nielsen describes consistency as: "Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform and industry conventions." The Match.com cancellation process violates this principle in several ways. The primary example is on Page 3, the retention offer page. Across the three versions of the flow, this page stands out for its inconsistency with the pages before and after it; it appears to be using a different stylesheet to render the buttons on the page, which are designed and labeled differently from the other pages, as it also lacks a page title. The experience is such that it appears to be an advertisement inserted into the cancellation process, rather than an actual step in the process itself. As a consequence,

some users may have become confused and assumed that they had left the cancellation process when arriving on this page, abandoning the flow.

The lack of “Continue Cancellation” button on the 2016 version of this page (Figure 6) is also egregious, especially given the use of such a button the preceding and anteceding pages as the only means of signaling continuity in the process; the use of a text link and the “resign” language undoubtedly caused substantial confusion to consumers, which I will discuss in more depth later in this report. I see this mixing of links and buttons on page 1 (Figure 4) as well, where the primary tasks on this page (Subscription Status and Cancel Subscription) are links that could easily be confused as headers, while the only button on the page (the primary call to action) takes the user back to MyMatch.com. Another consistency issue, which I will expand upon later, is the use of password authentication for access to the subscription cancellation flow. Beyond the initial website sign-in, which Match.com customers may have been able to stay signed-in to their accounts for extended periods of time, it does not appear from my review of the evidence that any other portion of the website after the user initially logged in required password authentication other than the subscription cancellation flow. The arbitrary placement of a password authentication mechanism at this specific point, and not at other points on the website where sensitive information could be accessed and changed without the account holder’s knowledge, suggests that the password authentication was placed at this point as an obstacle for users to access the cancellation flow. (I discuss the password authentication step in more detail below.)

### c. Aesthetic and Minimalist Design

Finally, Nielsen describes this final principle as: “Interfaces should not contain information that is irrelevant or rarely needed. Every extra unit of information in an interface competes with the

relevant units of information and diminishes their relative visibility.” The Match.com cancellation process violates this principle by inserting extraneous, unnecessary steps, making it far longer than necessary and subjecting its users to excess interactions that increase their cognitive load and makes it more likely that users will abandon their task mid-flow. The insertion of both the survey flow, as well as the retention offer, directly into the cancellation flow adds extraneous, unnecessary information and steps that could have easily been placed after the completion of the cancellation step, or designed in a way that could have been less taxing.

Another way the cancellation flow violates this principle is through introducing excess *friction* to the flow, which causes excessive cognitive load for users. As discussed in Section 3B. Heuristic Analysis, friction refers to “interactions that inhibit people from intuitively and painlessly achieving their goals within a digital interface.” Other experts have noted how some elongated flows create friction, for example in this paper analyzing unnecessary friction in cookie banner consent design: “While two different screens may not seem frictive (increasing friction), this flow is a dark pattern because of the lack of cues within the user interface to show the user which choices they have made, combined with a multi-step process.”<sup>53</sup> There is a similar kind of friction/frictive element present in the Match.com cancellation flows; various expert best practices for cancellation flows have recommended making surveys optional,<sup>54,55</sup> not forcing users to fill out a survey to

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<sup>53</sup><https://www.gmfus.org/sites/default/files/Sinders%2520-%2520Design%2520and%2520Information%2520Policy%2520Goals.pdf>

<sup>54</sup><https://www.campaignmonitor.com/blog/email-marketing/find-out-reasons-for-unsubscribing-with-a-quick-exit-survey/>

<sup>55</sup>[https://medium.com/@the\\_manifest/9-tips-for-compelling-email-unsubscribe-pages-e2e8cae01c8f](https://medium.com/@the_manifest/9-tips-for-compelling-email-unsubscribe-pages-e2e8cae01c8f)

unsubscribe<sup>56,57</sup> and to create very short, one question surveys.<sup>58,59</sup> Design expert Luke Wroblewski, in his work on forms and similar multi-step processes, notes that “[t]o keep people focused on completing a form, you also should consider which Web site elements help illuminate a clear path to completion and which elements distract from it...[r]emoving interface elements not directly related to completing a form helps keep people on task and removes paths to abandonment.”<sup>60</sup> By inserting 2-3 additional steps on new pages, as well as adding a password authentication step, Match.com increased friction and created barriers to the cancellation process, breaking established cancellation and design flow norms as argued in this section and above.

## II. Dark Patterns in the Cancellation Process

In addition to violating the design principles described above, I found several examples of dark patterns in the cancellation process. In this section I will review each type of dark pattern observed, where I identified it in the process, and when. It is important to note that dark patterns are not

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<sup>56</sup> [https://medium.com/@the\\_manifest/9-tips-for-compelling-email-unsubscribe-pages-e2e8cae01c8f](https://medium.com/@the_manifest/9-tips-for-compelling-email-unsubscribe-pages-e2e8cae01c8f)

<sup>57</sup> <https://www.litmus.com/blog/the-dos-and-donts-of-unsubscribes/>

<sup>58</sup> <https://ux.stackexchange.com/questions/17054/should-survey-for-canceling-subscription-be-before-or-after-the-subscription-is>

<sup>59</sup> <https://mailchimp.com/en-gb/help/edit-or-remove-the-unsubscribe-reason-survey/>

<sup>60</sup> Luke Wroblewski. Web Form Design: Filling in the Blanks. Rosenfeld Media: 2008.

Dark patterns on this page

1. This retention offer reads as an ad, and is different from the previous cancellation flow (this is a form of dark pattern called "Obstruction.")
2. Different design, layout and copy
3. Buttons change design in shape
4. Buttons change color
5. Buttons change copy
6. One button is removed; one button is left that reads "Get 3 More Months"
7. "I want to resign" is hyperlink (the use of a hyperlink instead of button is a documented dark pattern called "Denied Choice")
8. "I want to resign" does not say cancel; confusing language



**Figure 12: Identification of dark patterns on the 2016 retention offer (Page 3)**

mutually exclusive; a feature (e.g., the survey in the cancellation flow) may utilize more than one dark pattern in its design.

#### a. Obstruction

Obstruction is defined as “Making a process more difficult than it needs to be, with the intent of dissuading certain action(s).”<sup>61</sup> Brignull identifies a specific form of obstruction, the “roach motel,” where “the design makes it very easy for you to get into a certain situation, but then makes it hard for you to get out of it (e.g. a subscription).”<sup>62</sup> Obstruction can also be described as the inappropriate use of friction, as I discussed earlier, where additional steps or features require additional effort by users, increasing cognitive load, time spent, and making it difficult, if not impossible, for some users to complete the process. Obstruction was used throughout the entire

<sup>61</sup> Gray 2018, Mathur 2019.

<sup>62</sup> Brignull, *supra*.

cancellation process, making it longer and more complex than needed, and contributing to user confusion and task abandonment. I observed it at the following points:

- The password authentication requirement at the start of the process. As I discuss in more detail later in this section, this authentication screen appears to have been arbitrarily placed at this point in the flow. Given the comparative lack of risk to the user of a negative impact from an adversary accessing the account for this function as compared to other account functions that were not restricted by authentication, it is difficult to justify why password authentication was necessary at this step. Based on literature from computer security experts and practitioners, the context in which Match.com deploys password authentication bars users from accessing settings on their account that should be readily available.
- The inclusion of survey questions in the process. As I discussed above, peppering survey questions throughout the flow, as well as not indicating that the questions are optional, is a violation of cancellation best practices. A more appropriate point for Match.com to survey its customers would be on the cancellation confirmation page, or in a post-cancellation email, and to make it clearly optional. The inclusion of the survey questions throughout the cancellation flow wastes users' time and increases their cognitive load.
- Inconsistent design throughout the process. As I discussed earlier, the lack of consistency in design throughout the flow makes it difficult for users to understand where they are in the cancellation process and what steps are required in order to complete it. This was particularly apparent on Page 3, the retention offer page.

## b. Forced Action

Forced action is the practice of “requiring the user to perform a certain action to access (or continue to access) certain functionality.”<sup>63</sup> What makes an action forced is that there is weak, or zero, justification for the user to take the action; the point is to make the action egregious or laborious enough to disincentivize the user to complete their task. Forced action (as well as obstruction) can enable forced continuity by making it difficult to impossible for users to accomplish the goal of canceling a subscription.

There are multiple examples of forced action in the cancellation process:

- The password authentication page: as discussed earlier and in more detail later in this section, the password authentication step appears arbitrarily placed in relation to other options with access to vulnerable information. Users who did not remember their passwords were prevented from accessing the cancellation flow until they found or reset their passwords. This requirement introduces delay into the process, which can vary by user and the complexity of the password reset process, though among less sophisticated users the process of resetting a password could introduce significant delays and thus prevent them from returning to the cancellation task.
- Inserting survey questions on pages 2 and 4: again, because it was not obvious to users that the survey questions were optional, users were likely to believe that they were required to answer these questions in order to proceed with cancellation. The use of radio buttons as the interaction mechanism reinforces this expectation, as radio buttons are typically presented as an element that must be filled out and selected before moving forward in the

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<sup>63</sup> Gray 2018.

user flow (a practice that is appropriate for surveys in other contexts where a user **must** fill out each question to get to the end of survey). That nearly every option on page 2 spawned additional questions after selecting an initial response likely led many users to believe they had to answer every question asked of them. This feature also introduces uncertainty—how many new questions will continue to spawn after every answer I select? The dread of possibly spawning more and more questions presents a significant disincentive from continuing the cancellation flow. Again, these multiple questions, instead of one question, breaks the norm of cancellation flows. The open text response field on page 4 of the 2016 version of the flow would also have posed a challenge for users who were inexperienced with such questions or for whom writing responses was a challenge. This field also included a character count (maximum 1000), that some users could misinterpret as a requirement rather than a limit, or as a required number of words rather than characters. Combined with the lack of signaling regarding the number of steps required for users to cancel across all years of the flow I analyzed, the prospect of being forced to answer multiple survey questions across multiple pages would have negatively impacted the experience for many users and led to their abandoning the cancellation flow.

### c. Hidden Information

Match.com frequently hides or fails to disclose relevant information to users. Hidden information is defined as “options or actions relevant to the user but not made immediately or readily accessible.”<sup>64</sup> I observed at least two examples of hidden information:

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<sup>64</sup> Gray 2018.



- Representing the optional surveys are required: the survey questions presented on Page 2 (Survey S1) and Page 4 (Survey s2) appear required but are actually optional. It is possible for users to click through the pages and cancel without providing any answers. However, this fact is *never stated or signaled* in the cancellation process, nor are users asked if they want to complete a survey. Moreover, statements such as “Before you go, help us make Match.com better” and “Tell us more” would lead some users to believe the survey is compulsory or necessary for cancellation.<sup>65</sup> Later, I compare Match.com’s user flow to Facebook Dating, which presents its survey as optional and bypassable with the inclusion of a “Skip” text button. As mentioned above, design experts have recommended cancellation surveys be optional; users should be notified, either using language or design, that the survey they are filling out is optional, which Match.com failed to do.
- Findability of cancellation process: finding the means to cancel on the website was not a simple task. There appears to be a single pathway to start the process (as outlined in Table 1), which means that failure rates could be high if users did not discover it.<sup>66</sup> While the placement of the gear icon in the universal header adheres to accepted design practices, the use of the term “settings” in the drop-down menu is ambiguous and required exploration by users to encounter the Account Settings option; then, on the Account Settings page, there is no mention of cancellation, but instead the term “Manage Subscription,” which again doesn’t mention cancellation: “Update your membership and/or deactivate your

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<sup>65</sup> While some users may have felt compelled to click through the process to “submit” the survey, others may have found the use of the “Before you go” language on Page 2 (Survey S1) confusing to the point of suggesting that this page was the “final” cancellation page, and that Page 3 was an optional retention offer that didn’t require clickthrough. Please see Section 4.II.D.2, “Confusing Terminology,” for details. It is important to note that these interpretations are not mutually exclusive; both pose possibility for user confusion.

<sup>66</sup> There is a link within the Canceling help page that appears to deposit the user at the password authentication stage of the cancellation process. I have not observed any other direct links to the process in the materials I reviewed.

profile” in 2019 and earlier, “Manage Account” and then “Manage Subscription” on the 2022 version. Furthermore, the site’s help pages also buried information about membership cancellation; the Manage My Subscription help page doesn’t display the “Canceling” page unless the user clicks on a “See all articles” link, which then displays the full list of articles with “Canceling” at the very bottom. The help page also directs the user to the online process, and does not suggest that users contact an agent except in the context of canceling a free trial.

#### d. Content Strategy

The software product design process does not just consist of user research, engineering, or user experience (UX) design/graphic design. It also includes content strategy and copywriting. Content strategy and copywriting refer to the actual language and word choices within a software application (app) or product. Words, names and descriptors are as intentional, and planned as the design and coding of the app itself. It is crucial to analyze the language used within the Match.com cancellation flow in order to understand how it contributed to any user confusion, along with the frequency of the language/naming of the particular cancellation copy/content strategy choices and descriptions and the design and interaction patterns changes. All of these language choices (the content strategy and copywriting of the cancellation user flow) contributed to user confusion within the cancellation flow. I must emphasize that while the following section just focuses on content strategy, all of the below examples also coincided with graphical user interface changes, and these changes must be viewed together to understand the wider impact of the dark patterns and confusing elements within Match.com’s cancellation flow. The following paragraphs will focus specifically on the content strategy choices made by Match.com from 2016-2022.

## 1. Inconsistent Language

As mentioned earlier throughout this report, consistency is not only a tenet of good design,<sup>67</sup> it is a practice taught to designers, technologists and product managers. Consistency refers not just to consistent design choices, but also content strategy and copywriting, including use of language, voice, tone, and word choices. Consistency refers to internal consistency for employees and external consistency for users.<sup>68</sup> From 2016-2022, Match.com used inconsistent language throughout the cancellation process, particularly on page 3, the ‘retention offer page’ (Figure 6 for 2016, Figure 10 for 2019, Figure 13 for 2022). As highlighted above, the retention offer page from 2016-2022 changes visual design, UX design (page layout) and content strategy and copywriting design (language choices, tone and voice, etc.). Starting with 2016, the retention offer page shifts in tone and voice from the page previous, switching from third person to first person. Nowhere in the cancellation flow to this point has the “I” voice been used, but between page 2 and page 3 the button choices change from “Back to MyMatch.com” and “Continue Cancellation” to “Get 3 More Months” and the “No thanks, I want to resign” link.

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<sup>67</sup> Nielsen 1994.

<sup>68</sup> <https://uxdesign.cc/design-principle-consistency-6b0cf7e7339f>

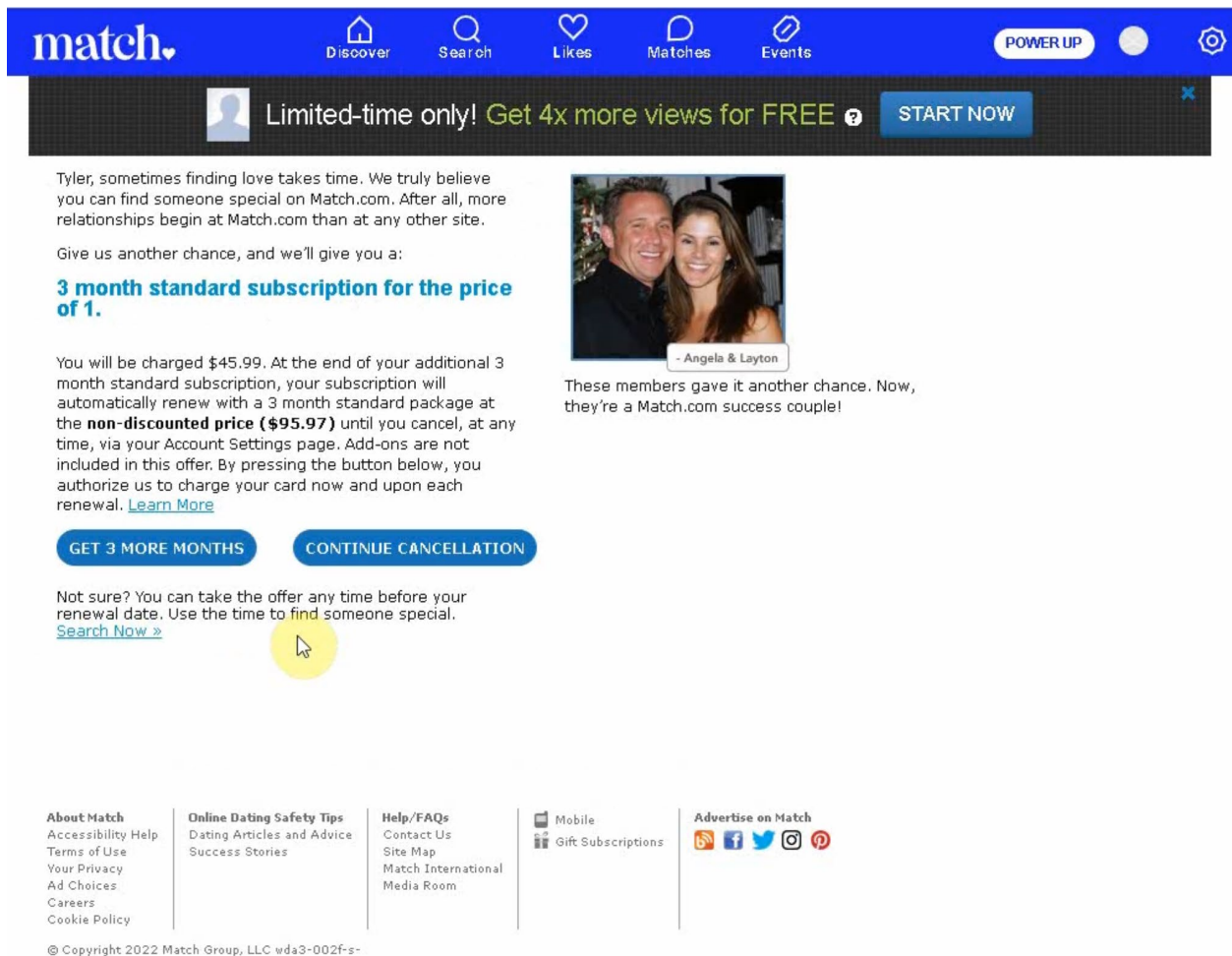


Figure 13: Retention Offer from 2022, Match Cancellation Process\_10-12-2022.wmv

The 2019 process features two different retention offer pages with one flow in 2019, captured from F01-MG-0028904.webm, that shows the retention offer page uses “Continue” instead of “Continue Cancellation.” Previous pages from F01-MG-0028904.webm use “Continue Cancellation,” with the retention offer page switching to “Continue” with previous and subsequent pages switching back to “Continue Cancellation.” However, the other flow from 2019, captured from MATCHFTC672309.mp4, and documented in 2022, show the retention offer page, has changed to include “Continue Cancellation” as a button, which is consistent, but the rest of the copy, design

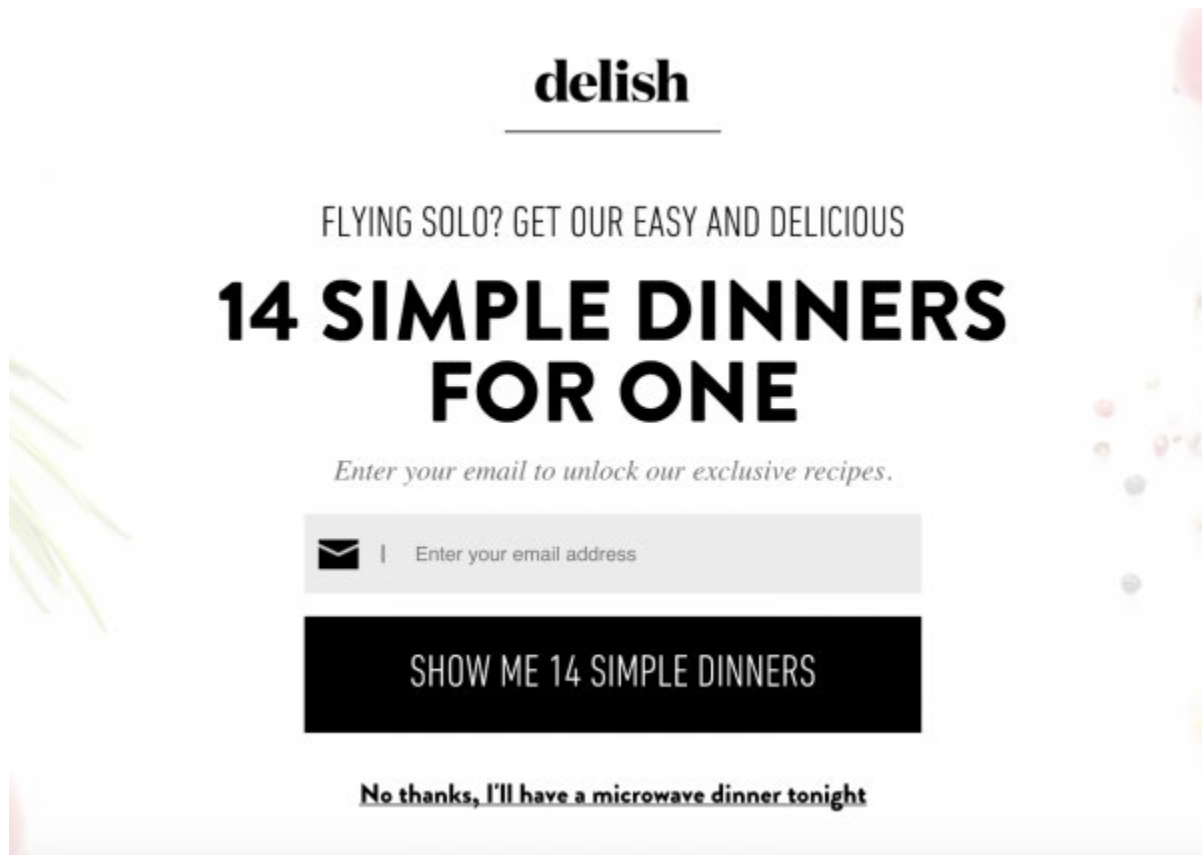
and images on the retention offer page is still similar, if not identical, to 2016, which again demonstrates a discontinuity in tone from the preceding and following pages. The copy on the retention offer page is similar to an ad, or coupon, and while it does mention cancellation, its tone shifts from survey style language to friendly ad copy, and then back to the survey tone on the following page.

Shifts in tone are forms of inconsistency; certain parts of a website, such as the landing page, might use a more personalized or friendly voice for new and returning users, while other parts of a website, such as a cancellation flow or a sign up flow, might use more general, and straightforward language. Specifically, different tones can signal different actions, or different parts of a website or product. Shifting tones within a specific flow, such as signing up or canceling, breaks ‘consistency’ and leads to confusion; for example, did the user accidentally click somewhere on the navigation and exit the flow they were in, or did they accidentally click on an ad? Consistent content strategy helps guide, ground, and place a user in a process, particularly as they are actively navigating a process, such as changing a feature or setting, or removing or deleting content or subscriptions. Relatedly, the kind of tone and language used by the retention offer page, which is different from the tone and language used in the rest of the cancellation flow, is an example of a dark pattern as ‘confirmshaming.’ Confirmshaming is defined as: “the act of guiltting the user into opting in to something. The option to decline is worded in such a way as to shame the user into compliance. The most common use is to get a user to sign up for a mailing list, and it is often found in exit intent modals and other popups.”<sup>69</sup> Other experts describe ‘confirmshaming’ as “using

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<sup>69</sup> <https://www.deceptive.design/types/confirmshaming>

language and emotion (shame) to steer users away from making a certain choice.”<sup>70</sup> For example, delish.com, an online food and lifestyle service, offers users to sign up for their email list; the option to decline (“No thanks, I’ll have a microwave dinner tonight”) is framed as inferior and undesirable compared to the option to accept (“Show Me 14 Simple Dinners”).<sup>71</sup>



**Figure 14: Delish.com using Partial Language to Discourage “Opt-Outs”**

Based on Figure 6 (Page 3 of the 2016 Cancellation Flow), Match.com also used a dark pattern called “confirmshaming” in their retention offer: “[User Name], sometimes finding love takes time. We truly believe you can find someone special on Match.com. After all, more relationships

<sup>70</sup> <https://arxiv.org/pdf/1907.07032.pdf>

<sup>71</sup> Eric Shroeder, “UX Dark Patterns: Manipulinks and Confirmshaming,” *UX Booth*. (June 4th, 2019). <https://www.uxbooth.com/articles/ux-dark-patterns-manipulinks-and-confirmshaming/>

begin at Match.com than any other website. Give us another shot and we'll give you \_\_\_\_\_ off your renewal.”<sup>72</sup> Additionally, an image of a couple is shown with the caption: “These members gave it another chance. Now they are a Match.com success couple!” The presentation of a ‘successful couple’ is questionable as a user may be canceling their subscription for any number of reasons, including having established a ‘successful’ relationship since starting Match.com. The usage of the confirmshaming along with the abrupt tonal shift from the rest of the cancellation flow, only heightens the inconsistent language which in turn can add to user confusion. Match.com’s own employees also appear to have found similarly; in document MATCHFTC320168\_image.pdf, page 1 notes that employees described the 2016 flow’s verbiage as ‘inconsistent’ and the retention offer as ‘misleading.’

## 2. Confusing Terminology

As mentioned above, Match.com repeatedly used inconsistent language and tone across the cancellation process. But the company also used confusing terms (copy) throughout the cancellation process as well. For example, in 2016, on the retention offer page, Match.com uses the phrase “No thanks, I want to resign.” Prior to this page, the cancellation flow has not used ‘resign’ at all, but instead has used ‘cancel’, ‘cancellation’ and ‘canceling.’ Match.com employees have referred to the cancellation process as ‘resignation process’ and have highlighted the flow itself is confusing to users.<sup>73</sup> The use of the term “resignation” in the retention offer leads to further confusion for users, as it has never been used in the cancellation process until this point, and is not used again on subsequent pages. A review of screenshots of the Match.com help pages provided

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<sup>72</sup> MATCHFTC761906.mp4; Please note that the renewal offer is ‘3 months for the price of one’ instead of a percentage off. All of the other documentation mentions 3 months for the price of one or 50% in their retention offer.

<sup>73</sup> MATCHFTC519412.pdf

to me by the FTC also does not include the term “resignation” throughout. While resignation is what Match.com internally refers to as ‘cancellation’, this is new language for users, and the word choice, coupled with the shift in tone and use of first person “I”, adds to further confusion.

As mentioned above, in one version of the 2019 flow,<sup>74</sup> Match.com’s retention offer uses “Continue” instead of “Continue Cancellation.” In this instance, ‘Continue’ creates ambiguity: what, exactly, is being continued? Does clicking ‘Continue’ kickstart the retention offer and not cancellation, or does ‘Continue’ continue the cancellation process? By switching the buttons’ naming conventions, along with the changes on this specific retention offer page, it creates confusion as to what task is being continued.

Another confusing example involves Page 2 of the cancellation flow (Figure 5), the first survey page. The headline on this page, “Before you go, help us make Match.com better” may have misled some users to believe that this was the final step in the cancellation process. The use of the term “before you go” makes it sound as if the user has already completed the process, and that the survey questions on this page were in fact a post-cancellation survey. Because this page was followed by the retention page, which appeared more like an ad than a clear step in the cancellation process, some users may have believed upon arriving on Page 3 that the cancellation process was complete, and dropped out at that point, when in fact in order to complete the cancellation they were compelled to click through Page 3.

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<sup>74</sup> F01-MG-0028904.webm



### III. The Password Authentication Screen

In this section, I review the use of the password authentication screen in depth. As discussed above, the password authentication screen was used as: a source of increased friction to make cancellation more difficult to access; to obstruct users from accomplishing the cancellation task; and as a form of forced action, by requiring users to complete a task unnecessary or unconnected from their primary goal (subscription cancellation). But because password authentication does have a critical and appropriate use, in this section I will review the appropriate justification for password authentication, and provide an analysis of what made Match's use of it in this flow *inappropriate*.

#### a. Password Friction: Balancing Users' Security and Ease of Access

A persistent problem in HCI and user studies is the counterbalance between privacy, security, and ease of use. This is most evident in the provision of password checks: sign-in or verification points at various points in the user flow. The contextual placement of these log-in points can cause undue friction, which leads to site hopping, reduced conversions, and task abandonment.<sup>75</sup> Password checks, failed attempts to reset passwords and account lockouts cause users to forgo online purchases.<sup>76</sup> In a study where over half of participants relied on social logins (sign-ins via connected social media platforms such as Facebook), half of participants were prone to abandon a website if asked to provide a password.<sup>77</sup> The lack of ease in these interactions can compromise the password check's original goal. In the same study, 12% of participants produced a "variation of an old password" and 2% defaulted to their previous password; 48% participants admitted they

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<sup>75</sup> Young, *supra*.

<sup>76</sup> "The Current State of Checkout UX-18 Common Pitfalls & Best Practices," Baymard Institute. <https://baymard.com/blog/current-state-of-checkout-ux>

<sup>77</sup> "Are Password Resets Costing Your Company?" Beyond Identity Blog, December 17, 2021. <https://www.beyondidentity.com/blog/password-resets-and-the-consumer-journey>

were very likely to abandon the site if they were explicitly told they could not use prior passwords. Evidently, password friction stifles users, yielding inferior or similar passwords, or causing user drop-off altogether.

The password authentication requirement for Match.com users attempting to manage their subscriptions may be described as a “pain point:” a hurdle or obstacle that decreases the quality of customer experience.<sup>78</sup> It is particularly obstructive because it appears that Match.com users could remain signed-in to their accounts for extended periods of time without receiving a password prompt, as well as access other account settings that posed a greater risk directly to the user if they were compromised, such as editing one’s name, email address, and password.<sup>79</sup> It appears the greatest risk posed by accessing the “Change/Cancel Membership” setting is to the company, who may experience higher cancellation levels through ease of access. This obstruction qualifies as an *interaction-level* pain point, in which the user experiences navigation difficulty regarding a product or service; as well as a *relationship-level* pain point, in which the user questions the quality of service by the service provider.<sup>80</sup> Pain points can deter users from task completion by increasing their cognitive load. Several financial institutions have set guidelines to mitigate customer dissatisfaction with online subscription practices. For example, major card companies mandate that online merchants notify customers upgrading their free trials to paid subscriptions prior to

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<sup>78</sup> Sarah Gibbons, Three Levels of Pain Points in Customer Experience. Nielsen Norman Group. (May 16, 2021). <https://www.nngroup.com/articles/pain-points/>

<sup>79</sup> Based upon evidence provided to me, it appears that when a user is signed into her account, the only point at which she would receive the password authentication screen was during the cancellation flow. I do not have knowledge of how long a user could remain signed in to their Match.com account before being asked to reauthenticate. However, it is common for many websites to allow users to remain signed-in for extended periods of time given how burdensome users can find password authentication.

<sup>80</sup> Gibbons, *supra*; Achonwa Alvan, What are pain points in design? Educative. <https://www.educative.io/answers/what-are-pain-points-in-design>

charges, as well as provide “clearer instructions about how to cancel.”<sup>81</sup> Additionally, Visa prescribes that customers “must be able to cancel their subscription online with the merchant, without needing to contact the merchant through another channel (e.g. a phone call).”<sup>82</sup>

These pain points are validated by work communications between Match.com employees. As of February 24, 2016, Match.com’s staff noted: “Also, the majority of members drop out when asked to re-enter their password so I’m not sure if they think they canceled, or if they were just clicking the button for the heck of it.”<sup>83</sup> As early as June 05, 2013, Match.com staff indicated:

“We need to take a look at our resignation flow...Currently the flow is very convoluted and confusing. We get a lot of customer care complaints about it. I want to see if there’s a way to clean up the flow, yet optimize it so we can try to save as many people from resigning as possible. If we can plug the hole where people are leaving the site, it can help with our PMC goals.”<sup>84</sup>

We have identified relevant security design principles and practices to evaluate the ease of Match.com’s cancellation. According to the *principle of psychological acceptability*: “security mechanisms should not make the resource more difficult to access than if the security mechanisms were not present.”<sup>85</sup> Desired resources should not be barred by security checks, and if they are, the

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<sup>81</sup> Alex Glaser, Customers fight surprise charges as online subscription surge. NBC News, December 23, 2020. <https://www.nbcnews.com/business/business-news/customers-fight-surprise-charges-online-subscriptions-surge-n1252149>

<sup>82</sup> Visa Business News, “Reminder: Updated Policy for Subscription Merchants Offering Free Trials or Introductory Promotions.” <https://usa.visa.com/dam/VCOM/global/support-legal/documents/subscription-policy-vbn-visa-public.pdf> (September 26, 2019).

<sup>83</sup> MATCHFTC320168\_image.pdf.

<sup>84</sup> MATCHFTC417535.pdf.

<sup>85</sup> Matt Bishop, *Computer Security: Art and Science*. Chapter 13: Design Principles, Page 348. Boston, MA: Addison-Wesley, 2003.

principle indicates that the burden imposed onto users in passing these checks must be *minimal* and *reasonable*. From the evidence aforementioned, I question whether the security check at the point of membership cancellation is reasonable for users, given Match.com allows users to remain logged-in for extended periods of time. In addition, I challenge the placement of the password screen in contrast to other account settings.

In the evidence reviewed, I did not observe the password screen invoked at any other point in any of the videos during various iterations of website usage.<sup>86</sup> In documents depicting the “Account Settings” from 2016 and 2019, the “Change/Cancel Membership” setting is the only one requiring a password—although several other settings could feasibly put the user’s account security and integrity at greater risk from an adversary having unauthorized access to a legitimate account. Specifically, in the video Match Cancellation Process\_10-12-2022.wmv, the user repeatedly clicks “back to home” and then proceeds through the flow clicking on multiple settings, then returns to the “Change/Cancel Membership” setting and is not required to authenticate again. This breaks the flow Match.com has introduced with the requirement of password authentication. With this break in the security pattern, it appears that the use of the password by Match.com is not a security measure, but one designed to create friction; if this was a choice motivated by security concerns, why does the site not require the user to sign in repeatedly each time they selected “Change/Cancel Membership”? To be clear, I am not recommending this behavior, but instead highlighting an inconsistency in the design flow. If this authentication step were truly a security feature, it would be consistent in terms of when the user has to sign in, such as upon returning to the home page. But instead, the password is not consistently required, and thus is a questionable security measure.

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<sup>86</sup> I assume in all the videos I reviewed that the user had already logged into the website at some point prior to the recording session.

I conclude that the presentation of the password screen during the cancellation process is arbitrarily placed compared to other account settings. Match.com's cancellation flow, in regard to its password friction, does not satisfy the *principle of psychological acceptability*. The placement of the password screen fails to be reasonable or minimal; obstructs user access unnecessarily; and deters legitimate users from resources on their account that should be readily accessible.

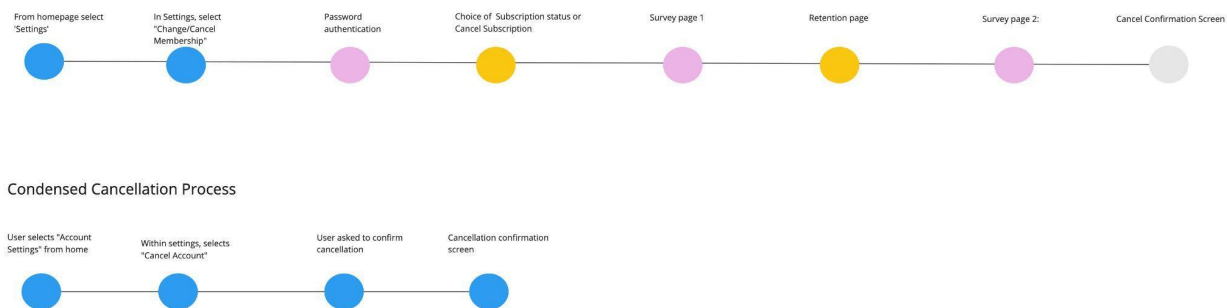
## 5. Conclusion: Putting the Heuristic Analysis into Perspective

This analysis demonstrates that the Match.com cancellation flow was neither easy to find nor easy to use throughout the entire timespan of my analysis. I mapped the evolution of the cancellation flow from the years 2016, 2019, and 2022. I marked introductions and changes to password screens, buttons, links, and copywriting. Based on this evolution, I concluded the following:

1. The cancellation flow fails to make visible what stage in the process users are in (see “Visibility of System Status”).
2. The process suffers from inconsistent design, terminology and language, thus confusing users (see “Consistency and Standards”).
3. Extraneous steps slow down the cancellation process. Password screens, surveys, and retention offers introduce unnecessary friction into the user journey (see “Aesthetic and Minimalist Design”).

While Match.com can, at their discretion, implement password checks, offer retention deals, and survey users, it is the *placement* of these items within the cancellation process that makes it difficult for users to complete. There are better placements for these items that do not obstruct the cancellation process.

Match.com Cancellation Process 2022 from Match Cancellation Process\_10-12-2022.wmv



**Figure 15: A comparison of the existing cancellation process as compared to a condensed process**

The inclusion of these extraneous steps increased the length of the flow by at least four steps, as Figure 15 demonstrates above. As a comparison, I created a condensed cancellation process consisting of the following steps:

1. From home page, select Account Settings;
2. Within the Account Settings, select “Cancel Account”;
3. Confirm cancellation;
4. Receive cancellation confirmation.

In this section, I will conclude my analysis first by drawing upon evidence provided to me by the FTC of internal discussions by Match.com employees about the cancellation flow, which can provide context for the problems I identified. Second, I will briefly talk about the larger landscape of concerns with dark patterns in subscription cancellations, focusing on practices by Match.com competitors, and then reviewing the larger policy context in which dark patterns are a focus of subscription cancellations.

## A. Evidence from Company Documents

After concluding my heuristic analysis of the website, I reviewed internal company documents provided to me by the FTC. I found that the documents supported the conclusions I have drawn in this report. Multiple documents validated the existence of customer complaints regarding Match.com's cancellation flow. There is evidence in the documents I reviewed that Match.com employees were aware that the cancellation process is problematic, with one employee noting in 2016 that "honestly it's been the same complaint for the past decade that I've been with Match ... it takes up to 7 or 8 clicks to complete the flow to turn off AR . . . even if you can figure out how to do it. Also, the majority of members drop out when asked to re-enter their password."<sup>87</sup> One exchange with customer support personnel, from 2015, highlights user abandonment with the retention page in particular: "The cancel/resign flow is like 5 steps. Many times the users think once they click "resign" that they are done. They're not, they have to click through the nag screens. Michele complained about this for years, but Product would not reduce the resign steps. It's not a bug. It's a feature."<sup>88</sup>

Another exchange from 2016 highlights that employees understood that "customers complain that they cancel and we still auto renew them," suggesting the survey was problematic, that there was confusing language, and that "there is no doubt that the resignation flow is extraneous and potentially confusing."<sup>89</sup> A technical resolutions supervisor, also in 2016, discussed in a long email memo that as of May they had already had over 1K complaints, and "[w]e believe we can make

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<sup>87</sup> MATCH320168\_image.pdf

<sup>88</sup> MATCHFTC519412.pdf

<sup>89</sup> MATCH543542.pdf



this process easier for our members who are already wanting to cancel (they've made it to the flow) but get stuck on survey pages, retention offers, etc and believe they canceled . . . by shortening the flow, we could make sure members who are wanting to cancel and who are already in the cancel the flow are able to complete cancellation successfully.”<sup>90</sup> In another, employees offered the following: “I want to see if there’s a way to clean up the flow, yet optimize it so we can try to save as many people from resigning as possible. If we can plug the hole where people are leaving the site, it can help with our PMC goals.”<sup>91</sup>

One aspect of the process that the internal documents illuminate is the arbitrariness of the password authentication step. Despite wide-ranging conversations about issues with the cancellation process, there is no mention of a security issue requiring password authentication. In fact, one presentation discussing the cancellation process documented the steps with this note: “Enter Password (Why?)”.<sup>92</sup> One staff member indicated that “the majority of members drop out when asked to re-enter their password so I’m not sure if they think they canceled, or if they were just clicking the button for the heck of it.”<sup>93</sup> From this communication, it is evident that the password screen caused users to flee the cancellation procedure without a clear understanding of their cancellation status. When reviewing Match.com’s *proposed* solutions to this problem, I found that one solution did not require password entry at all.<sup>94</sup> Instead, it notifies users of the 6-month subscription renewal date and chargeable amount, and provides three checkbox options: “Turn off automatic billing,”

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<sup>90</sup> MATCH464887.pdf

<sup>91</sup> MATCHFTC417535.pdf, *supra*.

<sup>92</sup> MATCHFTC543666.pdf

<sup>93</sup> MATCHFTC320168\_image.pdf, *supra*.

<sup>94</sup> MATCH491446.pdf

“Hide profile,” and “Permanently delete account.” A blue, rounded “Save Changes” button and a “Help” link accompany the three options. The proposed solution is followed by a caption:

“Proposed cancellation flow does not require re-entry of password, and provides simple and descriptive options for the member to choose from. Sometimes members just want to prevent future billing, and sometimes they want their account “removed” entirely. Once the “save changes” button is pressed, the member will see a cancel confirmation page and have the option to complete a survey.”

The proposed solution is clearer and more concise than the eight page/step cancellation flow. The most profound takeaway is that a cancellation flow without password authentication had the potential to simplify the customer journey. Moreover, this pitch pushes the survey form to *after* the cancel confirmation page and makes it *optional*. This solution was not implemented in the documents I received.

In addition to the password authentication issue, there are several documents proposing changes to the overall process to address customer dissatisfaction. The cost of hidden information becomes clear; in MATCHFTC543666, a PowerPoint presentation, Slide 2 notes that “We spend over \$1M per year to handle related Care contacts,” and that “Over half of member help searches are related to just 10 of our 400 FAQs. Guess what they’re related to—cancellations.”<sup>95</sup> Another email exchange from 2014 appears to document cancellation flow abandonment from the password page at a discrete moment in time (documenting a 80% click-through rate to the password authentication

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<sup>95</sup> MATCHFTC543666.pdf

page, and then a dramatic 6% click-through rate to following page, which appeared to be the retention offer at this stage in time, a drop of approximately 94% from the first page where the calculations were made).<sup>96</sup> Proposed changes, in addition to those described above in relation to password authentication, included shortening the overall process down to seven steps,<sup>97</sup> and moving the survey to a post-cancellation step.<sup>98</sup>

Finally, it is important to note that while this evidence demonstrates that some employees quantified the cost to the company of customers' need to contact customer service to cancel their accounts, their accounting does not capture the costs accrued by the customer in excess of any additional direct costs from uncanceled subscriptions, such as time spent trying to find another means to cancel, time invested in contacting and working with an agent to execute the cancellation process, and any frustration experienced from this process. These are harms attached to the dark patterns we described in Section 4.B.II.

## B. Competitor Practices

For comparison purposes, I conducted a heuristic analysis of two competitor websites that are not owned by Match.com's parent company: Facebook Dating and Coffee Meets Bagel, and their cancellation processes.<sup>99</sup> Below, I have attached a visualization of the cancellation process. Yellow represents the element of dark pattern(s) and pink represents frictions. Each step starts after the

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<sup>96</sup> MATCHFTC312903.pdf

<sup>97</sup> Id.

<sup>98</sup> Id., MATCHFTC491442.

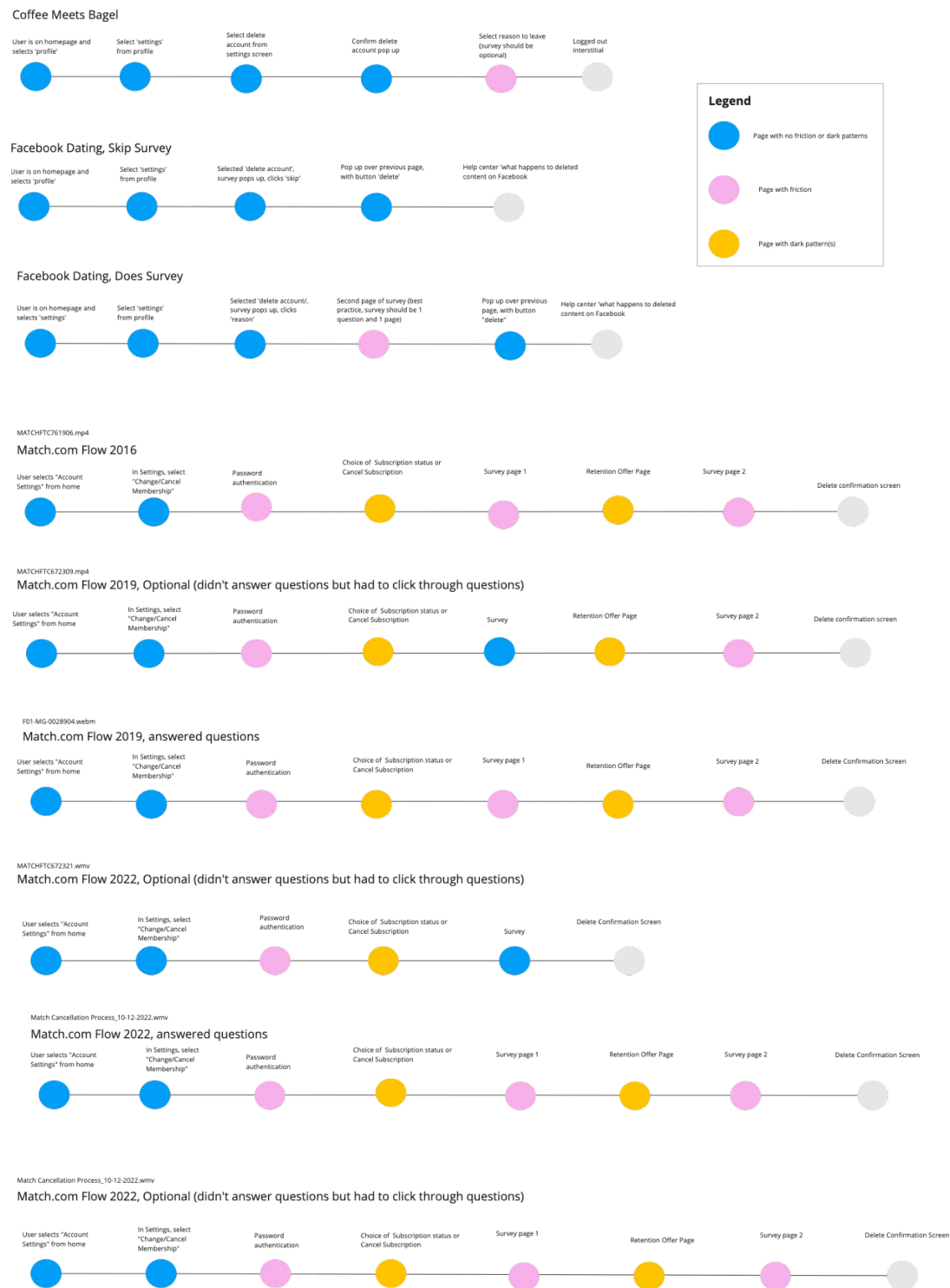
<sup>99</sup> Note that these reviews were conducted on the mobile versions of these services.

user has already found their settings (omitting the click for the user to get to their settings page). Coffee Meets Bagel had four steps with one step being friction-filled; a survey that was not marked optional. Facebook Dating has two different flows, one with a user able to ‘skip’ a survey, and one where a user completes out the survey. The Facebook ‘skip’ survey flow has three steps and no friction, but the flow with survey has four steps, with two survey pages.

However, the shortest version of the Match.com cancellation flow is from 2022,<sup>100</sup> which has four steps and apparently no retention offer page if the user selects the survey choice indicating that they have met someone. All other Match.com choices yield six steps within the cancellation, meaning the shortest Match.com flow is still the longest option of the competitors analyzed. Additionally, Match.com was the only product that had dark patterns and frictions in their user cancellation flows, in comparison to Facebook Dating and Coffee Meets Bagel. Relatedly, Match.com had each of the frictions from all of the Facebook Dating and Coffee Meets Bagel flows. Match.com’s flow had more friction and more dark patterns, than the two other competitors analyzed for this report.

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<sup>100</sup> MATCHFTC672321.wmv



**Figure 16: Comparison of cancellation flows between Match.com, Coffee Meets Bagel, and Facebook Dating**

### C. Conclusion

In conclusion, based on the evidence I have reviewed, I find the Match.com cancellation process neither easy to find nor easy to use, but instead plagued by noncompliance with design heuristics and dark patterns. Furthermore, the evidence I have reviewed demonstrates that the company was aware of these problems for potentially for a decade-plus, and yet chose not to address them. The result of these problems was to make it difficult, if not impossible, for many Match.com users to cancel their subscriptions using the online cancellation process, with many believing that they had canceled their subscriptions when in fact, they had not, thus accruing additional charges. Based on the documents I reviewed, it appears that many customers had to find other routes to contact the company outside the online cancellation process, but that those methods were also difficult to locate, and required additional and disproportionate investments of time by customers.

The analysis and opinions contained in this report are based on information available as of the date of the report. I reserve the right to supplement or amend this report should any additional information become available including, but not limited to, any expert reports submitted on behalf of defendants, deposition transcripts, and other information unavailable as of the date of this report.

I understand that this report may be used in a law enforcement proceeding. Pursuant to 28 USC Section 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

A handwritten signature in black ink that reads "Jennifer King, Ph.D." The signature is written in a cursive style with a large, looped 'J' and 'K'.

/S/

Jennifer King, Ph.D

January 13, 2023

Berkeley, California

# Appendix I: Dr. King’s CV

**Jennifer King, Ph.D, MIMS**

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**Research Summary**

I am an information scientist whose research sits at the intersection of human-computer interaction and public policy. My specific research focus is information privacy—how the public makes choices about their personal data in the context of their relationships with institutional actors, how the design of technology impacts these decisions, and how legal and policy infrastructures impact these choices. I use both quantitative and qualitative methods to examine these issues, focusing both on the role of interface design as well as social structure on individual decision-making.

**Present Role**

**Privacy and Data Policy Fellow, Stanford Institute for Human Centered Artificial Intelligence** Jan. 2021-present  
At HAI I conduct information privacy research with a specific focus on artificial intelligence, as well as work with Professors Sarah Billington and James Landay on a research project examining the impact of sensors used in workplace environments to promote health and well-being. In this role I also engage with and advise policymakers, legislators, and governmental entities on issues related to information privacy, as well as collaborate with HAI colleagues on promoting interdisciplinary policy-focused research at Stanford. Co-instructed the [National Research Cloud policy practicum](#) with Professor Dan Ho and HAI Director of Policy Russell Wald in winter/spring 2021.

**Education**

**University of California, Berkeley School of Information**  
**Ph.D, Information Management and Systems** 2009 – May 2018

- My dissertation, “Privacy and Social Exchange Theory,” used a social relational framework to explore consumer motivations for disclosing personal information to companies. I employed both qualitative and experimental methods for this research. It was selected as the runner up in the Information Schools (I-Schools) Organization’s 2019 Best Dissertation Award. Dissertation advisors: Deirdre Mulligan, Coye Cheshire, Steve Weber, and David Wagner.
- Focus areas: human-computer interaction, social computing, and information law and policy.
- Research funded by grants from the Center for Long Term Cybersecurity (inaugural grantee), the National Science Foundation through TRUST (Team for Research Through Ubiquitous Secure Technology) and the I3P (Institute for Information Infrastructure Protection).
- Co-director of the student led Center for Technology, Society & Policy for the 2016-2017 academic year. CTSP funds fellows and projects, organizes events, and hosts speakers supporting our four focus areas: engineering ethics, digital citizenship, evaluating technology policy, and supporting future technologists.

**University of California, Berkeley, Masters of Information Management and Systems (MIMS)** 2006

**University of California, Irvine, B.A., Political Science (Honors) and Sociology** 1994

**Professional and Research Experience**



**Director of Consumer Privacy, Center for Internet and Society, Stanford Law School** April 2018-Dec. 2020

In this role I conducted privacy-focused research in the public interest on topics such as genetic privacy, the Internet of Things, notice and consent, and artificial intelligence. I actively participated in the management of the Center, including strategic planning for research and fundraising. I also engaged with and advised policymakers, legislators, and governmental entities on issues related to information privacy.

**Co-Director, Center for Technology, Society & Policy, UC Berkeley** Aug. 2016 – July 2017

Co-director of the student led CTSP for the 2016-2017 academic year. CTSP funds fellows and projects, organizes events, and hosts speakers supporting our four focus areas: engineering ethics, digital citizenship, evaluating technology policy, and supporting future technologists.

**Contract Litigation Consultant/Expert Witness** 2010 –

present

I provided expert services to clients (Federal Trade Commission, Federal Reserve Board, State of Washington, City of Santa Monica, City of Santa Cruz, and others) focusing on online disclosures, negative option continuity programs, online credibility, deception, and general website usability issues.

Major Cases include:

- Testifying Expert, FTC vs. Amazon (2:14-cv-01038-JCC). I completed an expert report, rebuttal report, and was deposed. My expert report provided a heuristic analysis of the in-app purchase process as well as an analysis of thousands of customer complaints. The case was decided on summary judgment in favor of the FTC, finding Amazon liable for unauthorized in-app purchases by children on the Kindle Fire tablet.
- Testifying Expert, FTC vs. Commerce Planet (8:09-cv-01324-CJC(RNBx)). I completed an expert report, rebuttal report, was deposed, and testified at trial. The substance of my report was a heuristic evaluation of a portion of the Commerce Planet website to determine the clarity and conspicuousness of negative option marketing disclosures to consumers. The case resulted in a permanent injunction, restitution, and disgorgement against the defendant for deceptive and unfair practices violating Section 5(a) of the FTC Act.

**Research Specialist, Samuelson Law, Technology, & Public Policy Clinic, U.C.B. Law, Berkeley, CA** 2007-2009

- Utilized information science, social sciences, and experience in technology development and human-computer interaction to perform empirical research and develop policy recommendations focused on privacy issues with Internet technologies, ubiquitous computing and sensor networks, including RFID and video surveillance systems.

**Paranoid Yahoo!, Yahoo! Data Security (Paranoid) Team** (contract), Sunnyvale, CA 2006

- The Paranoid team worked to protect the privacy and integrity of Yahoo! user data worldwide.
- Developed strategic initiatives to combat password “phishing” threats for Yahoo! Users.
- Evaluated internal and external applications for data privacy and integrity threats, developing applications and internal policy.

**Researcher, Electronic Frontier Foundation, San Francisco, CA**

2005

- Investigated privacy policies governing user data on major search engines and privacy issues related to radio frequency identification (RFID) for EFF, a non-profit group that advocates for Internet civil rights, privacy, and free speech.

**Customer Trust Product Manager, Yahoo! Community Services, Sunnyvale, CA** 3.03 – 7.04

- The Customer Trust Manager role was a new position created on the Product Management team to combat abuse and illegal uses of Community properties, and to be an advocate for Yahoo! customers. This was one of the first Trust & Safety roles in the industry.
- Developed strategic and tactical Community anti-abuse initiatives, and evangelized these efforts across the company, working closely with legal, policy, data security, and various product teams.
- Focused on investigating deviant and anti-social users of Community products, and performed an extensive qualitative and quantitative analysis of a criminal user population to create policies and build software tools for

content moderation in order to curb their usage of the service; this effort decreased their content contributions to Yahoo! by over 80%.

**Associate Product Manager, Yahoo! Personals, Sunnyvale, CA**

9.02 –

3.03

- Managed feature development from conception to completion, working with marketing, interaction and visual design, web development, engineering, and quality assurance teams.
- Drove development of front-end and back-end features, including video greetings, direct marketing programs, and internal customer care tools.
- Led the creation of anti-fraud initiatives, increasing customer retention and recapturing over \$4M in annual revenue.

**Senior Producer, Kaplan Tech West, a subsidiary of Kaplan, Inc. Oakland, CA**

10.00 – 9.02

- Kaplan Inc. is an international educational services company. Kaplan Tech West was Kaplan's primary software development team, charged with building an online distance-learning platform.
- Oversaw end-to-end development of the learning platform's XML-based content authoring system, including requirements gathering, usability testing and evaluation, interface design, and user training.
- Performed a detailed semantic analysis of Kaplan instructional content, and worked with data architects to refine models for encoding Kaplan content in XML.

**Producer, Desktop.com, San Francisco, CA**

7.00 – 10.00

- Created new applications for Desktop's Internet-based computer desktop product, performed market research and analysis of key competitors, and designed interface improvements to existing applications.

**Assistant Producer, Productopia.com, San Francisco, CA**

5.99

– 7.00

**Peer Reviewed Journal and Conference Papers**

Mulligan, D.K., Regan, P.M. and **King, J.** (2020), The Fertile Dark Matter of Privacy takes on the Dark Patterns of Surveillance. *J. Consum. Psychol.*, 30: 767-773. <https://doi-org/10.1002/icpy.1190>

**Jennifer King.** 2019. "Becoming Part of Something Bigger": Direct to Consumer Genetic Testing, Privacy, and Personal Disclosure. *Proc. ACM Hum.-Comput. Interact.* 3, CSCW, Article 158 (November 2019), 33 pages. <https://doi.org/10.1145/3359260>

Christopher Thompson, Maritza Johnson, Serge Egelman, David Wagner, and **Jennifer King.** "When It's Better to Ask Forgiveness than Get Permission: Attribution Mechanisms for Smartphone Resources." Presented at the Symposium on Usable Privacy and Security, July 2013. Newcastle, UK.

**Jennifer King,** Airi Lampinen, and Alex Smolen. "Privacy: Is There An App For That?" Presented at the Symposium on Usable Privacy and Security, July 2011. Pittsburgh, PA.

**King, Jennifer** and Selcugoklu, Aylin. "Where's the Beep? User Misunderstandings of RFID." In Proceedings of 2011 IEEE International Conference on RFID.

M. Meingast, **J. King,** D. Mulligan. "Embedded RFID and Everyday Things: A Case Study of the Security and Privacy Risks of the U.S. e-Passport." In Proceedings of IEEE International Conference on RFID, March 2007.

M. Meingast, **J. King,** D. Mulligan. "Security and Privacy Risks of Embedded RFID in Everyday Things: the e-Passport and Beyond," *Journal of Communications*, 2(7), 2007.

## **Law Review Articles and Refereed Workshop Publications**

**Jennifer King** and Adriana Stephan. Regulating Dark Patterns in Practice – Applying the California Privacy Rights Act. *Georgetown Technology and Law Review*. 5 *Geo. L. Tech. Rev.* 251 (2021).

**Jennifer King**, Richmond Wong, Rena Coen, Jael Makagon, and Andreas Katsanevas. “This All Seemed Fairly Normal To Me” □ The Absence of Effect of Privacy Policy Links on Invasive Personal Disclosure. Presented at the Privacy Law Scholars Conference (invitation only), May 2019, Berkeley, CA.

**Jennifer King**, “Privacy, Disclosure, and Social Exchange Theory.” UC Berkeley dissertation, filed May 2018. A draft of this work was presented at the Privacy Law Scholars Conference (invitation only), June 2015, Berkeley, CA.

**Jennifer King**, “Understanding Privacy Decision-Making Using Social Exchange Theory.” Presented at The Future of Networked Privacy: Challenges and Opportunities workshop, CSCW March 2015.

**Jennifer King**. “Taken Out of Context: An Empirical Analysis of Westin’s Privacy Scale.” Presented at the Workshop on Privacy Personas and Segmentation (PPS) at SOUPS, July 2014. Menlo Park, CA, USA.

Deirdre K. Mulligan and **Jennifer King**. “Bridging the Gap Between Privacy and Design.” *University of Pennsylvania Journal of Constitutional Law*, Vol. 14, Issue 4, 2012. Selected as a Leading Paper for Policymakers by the Future of Privacy Forum, 2012.

**Jennifer King**. “How Come I’m Allowing Strangers To Go Through My Phone?: Smartphones And Privacy Expectations.” Presented at the [Workshop on Usable Privacy and Security for Mobile Devices \(U-PriSM\)](#) at SOUPS, July 2012. Washington, D.C., USA. Note: This paper was also presented at the Privacy Law Scholars Conference (invitation only), June 2012, Washington, D.C., USA. Selected as a Leading Paper for Policymakers by the Future of Privacy Forum, 2012.

**Jennifer King** and Deirdre K. Mulligan. “Reconceptualizing Privacy for Social Media Research and Design.” Presented at *Reconciling Privacy with Social Media* workshop, CSCW, 2012.

**Jennifer King** and Andrew McDiarmid. “Where’s The Beep? Security, Privacy, and User Misunderstandings of RFID.” In proceedings of USENIX Usability, Security, and Psychology. San Francisco, CA, April 14, 2008. Available at: <http://portal.acm.org/citation.cfm?id=1387652>

Egelman, Serge, **King, Jen**, Miller, Robert C., Ragouzis, Nick, and Shehan, Erika. “Security User Studies: Methodologies and Best Practices.” Extended abstracts of the ACM Conference on Human Factors in Computing Systems (CHI 2007). San Jose, CA, USA, April 28, 2007.

## **Research Reports and White Papers**

Daniel Ho, **Jennifer King**, Russell Wald, and Chris Wan. Building A National AI Research Resource: A Blueprint for A National Research Cloud. White Paper: Stanford Institute for Human-Centered Artificial Intelligence, October 2021. Available at: <https://hai.stanford.edu/policy/national-research-cloud>

**King, Jennifer**; Flanagan, Anne; Warren, Sheila. Redesigning Data Privacy: Reimagining Notice & Consent for Human-Technology Interaction. White paper report: World Economic Forum, 30 July 2020. Available at: <https://www.weforum.org/reports/redesigning-data-privacy-reimagining-notice-consent-for-humantechnology-interaction>.

Hoofnagle, Chris; **King, Jennifer**; Li, Su; and Turow, Joseph. "How Different are Young Adults from Older Adults When it Comes to Information Privacy Attitudes and Policies?" April 14, 2010. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1589864](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1589864). Selected as a Leading Paper for Policymakers by the Future of Privacy Forum, 2010.

Turow, Joseph; **King, Jennifer**; Hoofnagle, Chris; Bleakley, Amy; and Hennessey, Michael. "Americans Reject Tailored Advertising and the Three Activities That Enable It." September 29, 2009. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1478214](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1478214)

**Jennifer King**, Deirdre Mulligan, and Steven Raphael. "CITRIS Report: An Evaluation of the Effectiveness of the City of San Francisco's Community Safety Cameras." Presented before the City of San Francisco Police Commission, January 2009. Available at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2183381](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2183381)

Chris Jay Hoofnagle and **Jennifer King**. "Research Report: What Californians Understand About Privacy Online." September 3, 2008. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1262130](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1262130)

Chris Jay Hoofnagle and **Jennifer King**. "Research Report: What Californians Understand About Privacy Offline." May 15, 2008. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1133075](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1133075)

**Jennifer King** and Chris Jay Hoofnagle, "A Supermajority of Californians Support Limits on Law Enforcement Access to Cell Phone Location Information," February 2008. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1137988](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1137988)

Chris Jay Hoofnagle and **Jennifer King**. "Consumer Information Sharing: Where The Sun Still Don't Shine," December 2007. Available at: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1137990](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1137990)

### **Op-Eds and Popular Press**

Jennifer King. "[A Bill Designed to Protect Kids Could Change the Internet for the Better.](#)" Tech Policy Press, September 15, 2022.

**Jennifer King** and Eli MacKinnon. "[Do the DMA and DSA Have What It Takes to Take on Dark Patterns.](#)" Tech Policy Press, June 23, 2022.

Jennifer King. "[Opinion: After Rape Survivor's Arrest, It's Time To Rethink Genetic Databases.](#)" *The Washington Post*, Feb. 17, 2022.

**Jennifer King** and Jael Makagon. "[The fallacy behind private surveillance cameras in San Francisco.](#)" *Cal Matters*, August 9, 2020.

Jen King. "[Change your phone settings so Apple, Google can't track your movements.](#)" *The Conversation*, Jan. 14, 2019.

### **Invited Talks & Panels**

Regulating Artificial Intelligence Through Data Protection. [Global Privacy Assembly](#), Keynote Speaker, October 18, 2021.

[Bringing Dark Patterns To Light—An FTC Workshop](#). Panelist, April 29, 2021.

[Dark Patterns, Icons and Toggles: A Conversation on Design and Regulation](#). IAPP Global Summit, April 23, 2021. (panelist)

[Dark Patterns: Manipulative UX Design and the Role of Regulation](#). Future of Privacy Forum, March 24, 2021. (main presenter)

[The Rise of Trust Brokers](#). World Economic Forum Sustainable Development Impact Summit, Sept. 24, 2020.

[“Notice, Consent, and Disclosure in Times of Crisis.”](#) Atlantic Council Data Salon Series, May 27, 2020.

“Integrating Privacy, Personal Disclosure, and Social Exchange Theory: An Experimental Test.” [Ostrom Workshop Colloquium](#), Indiana University, Bloomington, IN, October 21, 2019.

[The Trust Paradox: The Future of Privacy and Transparency in the Digital Economy \(panel\)](#). The Churchill Club, San Mateo, CA, March 29, 2019.

“The Cambridge Analytica Debacle,” International Association of Defense Counsel, Santa Barbara, CA, February 27, 2019.

“Privacy, Anonymity, and Consent.” [Conference On Mobile Position Awareness Systems and Solutions](#), San Francisco, CA, Sept. 7, 2018.

Data Privacy Day (panel), World Economic Forum Center for the Fourth Industrial Revolution, San Francisco, CA, June 5, 2018.

[Designing Trustable Products: Microinteractions Matter For Secure UX](#) (panel). O’Reilly Design Conference, March 22, 2017.

Security & Human Behavior, Harvard Law School, May 2016.

TRUSTe Internet of Things Privacy Summit, June 17, 2015. Panelist, “Enabling Smart Cities: Planning for Privacy.”

In Short – Advertising and Privacy Disclosures for a Digital World. Federal Trade Commission workshop, May 30, 2012. – Opening speaker and panelist.

How To Personalize Without Being Creepy. SXSW Interactive – March 14, 2011. Austin, TX. – Panelist.

“A Supermajority of Californians Support Limits on Law Enforcement Access to Cell Phone Location Information,” given at the 37<sup>th</sup> Research Conference on Communication, Information and Internet Policy (TPRC), September 26, 2008, George Mason University, Alexandria, VA.

“Where’s the Beep? Security, Privacy, and User Misunderstandings of RFID,” given at “Pay On The Go: Consumers and Contactless Payment,” Federal Trade Commission Town Hall Meeting, July 24, 2008, University of Washington, Seattle, WA. – Panelist.

“The State of CCTV in the United States,” given at the 3<sup>rd</sup> Annual Surveillance and Society Conference “InVisibilities: The Practice and Experience of Surveillance in Everyday Life,” April 3, 2008, University of Sheffield, Sheffield, England, UK.

“CCTV: Developing Privacy Best Practices,” Department of Homeland Security Workshop, December 17-18, 2007, Alexandria, VA. – Panelist

“Sensors as Disruptive Technology: Guidelines for Future Development,” given at the IBM Sensor Day, October 2007, UC Berkeley, Berkeley, CA.

“Embedded RFID and Everyday Things: A Case Study of the Security and Privacy Risks of the U.S. e-Passport,” given at the IEEE International Conference on RFID, March 2007, Grapevine, TX.

“RFID: A Case Study of the Risks and Benefits of Location-Aware Technologies,” given at the O’Reilly Emerging Technology Conference, March 8, 2006, San Diego, CA.

### **Awards, Honors and Service**

#### *Awards:*

Best Dissertation Award, Runner-Up: Information Schools (I-Schools) Organization, 2019

Selected leading paper, Future of Privacy Forum’s Annual Privacy Papers for Policy Makers Award, 2012 (two papers) and 2010. *This Award recognizes leading privacy scholarship that is relevant to policymakers in the United States Congress, at U.S. federal agencies and for data protection authorities abroad.*

UC Berkeley School of Information Dr. James R. Chen Award for Outstanding Master’s Final Project “Social Uses of Communication Backchannels in a Shared Physical Space,” 2006.

#### *Public Service:*

Committee Member, California State Advisory Board on Mobile Privacy Policies, 2012

Member, State of California RFID Advisory Board, 10.07 – 3.08

#### *Leadership Roles (Conferences and Workshops):*

Program Committee, *Symposium on Usable Privacy and Security*, 2020

Organizer, *Redesigning Consent for Better Data Protection*, Oct. 2-3, 2019. Co-hosted with the World Economic Forum Center for the Fourth Industrial Revolution, San Francisco, CA

Program Organizer, *Workshop on Privacy Indicators and The Future of Privacy Indicators Workshop*, SOUPS, June 2016

Program Organizer, *Bridging the Gap Between Privacy by Design and Privacy in Practice*, CHI, May 2016

Program Organizer, *Privacy By Design: Privacy Enabling Design*, Computing Community Consortium, May 2015

Program Organizer, *Security User Studies: Methodologies and Best Practices*, CHI Workshop, 2007

Committee Member, *Privacy & Power: Acknowledging the Importance of Privacy Design for Vulnerable Populations*, CHI Workshop, 2020

Committee Member, *Ubiquitous Privacy: Research and Design for Mobile and IoT Platforms*, CSCW Workshop, 2019

Committee Member, *The Future of Networked Privacy: Challenges and Opportunities*, CSCW Workshop, 2015

Committee Member, *Measuring Networked Privacy*, CSCW Workshop, 2013

#### *Conference & Journal Reviewing:*

CSCW: 2019, 2017, 2016, 2015, 2013

International Workshop on Privacy Engineering – IWPE 2016

CHI: 2020, 2019, 2018, 2014

IEEE RFID 2012

## Appendix II: List of all cases Dr. King was deposed or testified at trial

### **Dr. Jen King, Testifying Roles and Depositions as of Jan. 2023**

#### Testifying Roles:

- 2012: FTC vs. Commerce Planet (8:09-cv-01324-CJC(RNBx))

#### Depositions:

- 2022: State of Arizona vs. Google (CV 2020-006219)
- 2022: Washington D.C. vs. Instacart (2020 CA 003777 B)
- 2015: FTC vs. Amazon (2:14-cv-01038-JCC)

# EXHIBIT 2





# Expert Report of Brandon Ward Regarding Match.com's Online Subscription Cancellation Flow

January 13, 2023



## I. QUALIFICATIONS

1. I am the Chief Experience Officer (CXO) and Senior Director of User Experience at Precocity, LLC, located in Dallas, TX. I am also the Chief Experience Officer for iMPact Utah in Lindon, UT. I am an instructor for the Continuing and Professional Education (CAPE) program at Southern Methodist University in Dallas, TX, where I teach principles and practices of user experience (known in the industry as “UX”) and service design relating to websites, online flows, and other research and design-related activities.
2. I received my M.S. in Telecommunications from Indiana University, Bloomington through the Masters in Immersive Mediated Environments program in 2004. My focus of study was interactive media design, including sound and music. I received multiple B.A.s in Vocal Performance, Music Theory and Composition, and Theatre from the College of Idaho where I graduated Cum Laude in 2000.
3. I am the co-founder of the Dallas chapter of the Service Design Network. I speak professionally at conferences around the United States on topics of design and user experience. From 2000 to the present, I have served as a designer and design leader both in-house and with agencies. A true and correct copy of my Curriculum Vitae (CV) is attached as [Appendix A](#).
4. I am an independent consultant on several matters regarding usability and experience design through Precocity, LLC, and Nonlinear Media, LLC. A list of representative clients is attached as [Appendix B](#).
5. I have written numerous articles and delivered numerous talks (listed on my website [brandonebward.com](http://brandonebward.com)), in addition to many expert analyses and usability reports, and I have expertise in website information architecture, usability, and design.
6. I have conducted usability and user research studies on several occasions in the past, including:

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CONFIDENTIAL—FTC v. MATCH.COM

- a. **Toyota**—I led the introduction of usability testing of digital products/projects at Toyota Motors North America (TMNA) and Toyota Connected (TC). From 2017 to 2020, I led the research and testing for Toyota's next-generation in-dash navigation and entertainment systems. My team and I spent hundreds of hours in moderated tests with users using functional prototypes to gather user feedback, sentiment analysis, and usability metrics around Toyota's in-dash software. We introduced usability testing more broadly to Toyota, revolutionizing how they think about and build software products.
- b. **US Air Force**—I led the research and study of officer training programs, technology, and methodology at the Sheppard Air Force base in Wichita Falls, TX. My team and I observed and interviewed students, teachers, and staff in and out of the classroom. We reviewed current hard and software platforms, tools, assets, and applications. We presented our findings and recommendations to the base commanding officers.
- c. **Love's Travel Stops**—I led the research team in the production of a comprehensive journey map and service blueprint for Love's tire care and mechanics' service. We performed live intercepts at Love's travel stops of Love's customers (primarily truck drivers) and performed onsite one-on-one interviews to understand their experiences, thoughts, feelings, and actions when engaged with Love's services. We then went onsite to Love's headquarters and performed onsite one-on-one interviews with Love's staff to understand the back-of-house experiences, thoughts, feelings, actions, and technologies when engaged with Love's customers using their services. Over 70 interviews were conducted, analyzed, and mapped. We presented our findings to the Love's executive leadership team including hundreds of recommendations that could improve their staff and customer experiences.

7. For my work on this case, I am being compensated at my customary rate of \$275 per hour. I was assisted in this assignment by my team at Precocity, LLC. Their billing rates are \$200 per hour. Neither my compensation nor that of Precocity, LLC is dependent upon my opinions or the outcome of this usability study or case.

## II. ASSIGNMENT

8. I was retained by Sidley Austin LLP to use my expertise in website design and user experience to evaluate and offer opinions about Match.com's online subscription cancelation flow. I understand that, in this case, the Federal Trade Commission (FTC) has alleged that Match.com's online cancelation flow is not a "simple" method for Match.com subscribers to cancel recurring payment subscription services. I was not asked to opine on other methods Match.com offers for subscribers to cancel and I offer no opinions about those other methods. My assignment was to assess whether Match.com's online subscription cancelation flow is, in fact, "not simple," as the phrase may be understood within the scientific field of user experience and website usability, and mindful of the published FTC guidance about the meaning of that phrase.

## III. APPROACH AND METHODOLOGY

9. The Restore Online Shoppers' Confidence Act (ROSCA) nowhere defines the term "simple." I am informed by counsel for Match there are no reported decisions by the courts that provide parameters for assessing whether an online cancelation flow satisfies ROSCA's basic requirement. The FTC itself has offered little public guidance on this subject. In its "Enforcement Policy Statement Regarding Negative Option Marketing" (released in 2021), the FTC has stated that to meet the simplicity standard, "negative option sellers should provide cancelation mechanisms that are at least as easy to use as the method the

consumer used to initiate the negative option feature,” and that negative option sellers “should not subject consumers to new offers or similar attempts to save the negative option arrangement that impose unreasonable delays on consumers’ cancelation efforts.” But the FTC’s enforcement policy further explains that “[w]hile a request to consider an offer or discount would not amount to an unreasonable delay, multiple requests for a consumer to listen to additional offers, lengthy pitches, or ignoring a consumer’s request to decline further offers could amount to an unreasonable delay.” In a separate statement, Commissioner Phillips noted this guidance “explains how the Commission interprets” the term “simple,” permitting “a cancelation mechanism that is as easy to accomplish as signing up, whilst preserving the opportunity for a business to make an offer to induce a consumer to stay.”

10. With this guidance in mind, I set out to assess the Match.com cancelation flow against this stated standard. I used methodologies commonly accepted in the user experience field to evaluate: (a) whether the flow is consistent with, or better than, industry standards for online cancelation flows; (b) whether subscribers can effectively accomplish the objective of the flow; (c) whether any save offers or surveys embedded in the Match.com flow cause unreasonable delay in a subscriber’s cancelation effort; and (d) whether any aspect of the flow appeared designed to cause subscribers undue or unreasonable difficulty in canceling.
11. Experts in the field of usability generally do not use the standard of “simple.” Rather, we use the standards of “clear” (meaning can the flow be understood by reasonable users) and “effective” (meaning is the flow designed in a reasonable way that users can accomplish the task without undue burden). For the purposes of my study and conclusions contained in this Report and as I may testify, the phrases “clear and effective” and “simple” can be used interchangeably.

12. In performing this assignment, I used the same methodologies I use in my expert consulting and academic work.
13. First, I conducted what is commonly referred to as a “heuristic” analysis of Match.com’s online cancelation flow on a desktop/laptop computer and assessed whether the flow was usable and simple, based on standard principles of web usability and design.
14. To conduct this heuristic analysis, I relied on two standards commonly used in the field of website usability: Jakob Nielsen's Ten Heuristics of Usability and Nielsen Norman Group’s Five Quality Components. Nielsen’s usability heuristics and quality components are used to evaluate “how easy user interfaces are to use.” (“Usability 101: Introduction to Usability” n.d.) These Nielsen heuristics are the gold standard in evaluating web usability and design. Next, I used Nielsen's five quality components. These quality components are similarly used to identify whether an interface is usable and simple (“Usability 101: Introduction to Usability” n.d.).
15. Second, I evaluated the Match.com cancelation flow against standard and best practices for website design.
16. Third, I designed and conducted an empirical usability study, which tested whether the Match.com cancelation flow is clear and effective. This empirical study instructed potential Match.com subscribers to sign up for a Match.com subscription which had a negative option feature and then cancel the subscription using Match.com’s online cancelation flow. I analyzed whether participants were able to successfully cancel, how long it took them to cancel, and their perceptions of the simplicity or difficulty of the cancelation process.
17. Finally, I analyzed Match.com subscriber data to identify whether subscribers were able to cancel and determine if they had difficulty doing so. This included an analysis of and conclusions regarding (a) the percentage of Match.com subscribers who successfully canceled subscriptions, having demonstrably

whether this real-world data was consistent with my heuristic analysis and usability study results.

18. I have reported the opinions I have reached from these analyses and the reasons and bases for my opinions in this report and appendices.

## IV. SUMMARY OF OPINIONS

19. In my professional, expert opinion, the Match.com online cancelation flow is clear and effective. It can be accessed using industry-standard icons, has clear labels, and follows a logical, short path to a conclusion. It is easy to complete. The first thing I did when I was retained for this case was to subscribe to Match.com and then try to cancel my subscription online. I expected, based on the FTC's allegations, that this cancelation process would be difficult, time-consuming, and/or confusing. But this was not what I found. Instead, I found Match.com's cancelation process is standard for subscription cancelation processes with which I am, in my professional capacity, familiar. Indeed, the processes used are similar to many online subscription cancelation processes across industries and areas. I identified nothing unusual, unique, or difficult with this process.

20. As explained in Section VI, from my heuristic analysis, I concluded Match.com's cancelation flow meets the applicable Nielsen usability (and simplicity) heuristics, and it satisfies Nielsen's 5 quality components of usability. Thus, the Match.com online cancelation process meets generally accepted standards of usability in the field and contains features common to other subscription websites.

21. In Section VII, I describe the results of the empirical usability study. This study shows:

- **Objectively, it was easy for participants to cancel**
  - **91.5%** of participants who signed up were able to cancel successfully via the online cancelation flow. Any score above 80% in a study like this would demonstrate usability and

simplicity. Match.com's score, which was above 90%, proves its cancelation process is simple and easy to use.

- It took participants an average of **74 seconds** to cancel online on Match.com. This length of time is reasonable for a cancelation task, again indicating the cancelation process is simple and easy to use.
- **Participants were able to cancel more easily than they were able to sign up**
  - Participants were able to cancel much faster than they were able to sign up – average cancelation was **16.3% of the time** it took to sign up or **6.1 times faster**.
- **Subjectively, participants believed cancelation was simple (and simpler than signing up)**
  - **84.7%** of participants thought canceling was at least as simple as signing up
  - **88.3%** of participants thought canceling was simple or were at least neutral as to the simplicity/difficulty
- **Match.com received an "A Grade" on a System Usability Score (81.6), which makes it among the top 10% of all websites in terms of usability.**

22. Third, my analysis of Match.com's actual user data indicates the cancelation process is simple and is consistent with the results from my usability study: Specifically:

- Match.com's subscriber data shows that over 95% of subscribers who clicked "Cancel Subscription" either took a save offer (i.e., decided to renew rather than cancel) or successfully canceled via the online cancelation flow. The remaining 5% could certainly have changed their minds about



**A 95% success rate indicates the cancellation process is simple and easy to use.**

- Match.com’s subscriber data shows the median time for subscribers to complete cancellation, from the time they select “Cancel Subscription,” is, on average, 44 seconds—more than 4 times faster than the average time it takes to complete only the Match.com subscription purchase process (excluding registration time, even though registration is necessary before purchasing a subscription, making this analysis conservative). The speed with which subscribers can complete the cancellation process, and the fact that the cancellation process is quicker than the subscription process, is more evidence that Match.com’s online cancellation process is simple.

## v. BACKGROUND ON THE CANCELATION PROCESS

23. In this Section, I describe the Match.com online cancellation flow and comment on its components from a website design and usability perspective.

24. There are (at least) two ways for Match.com subscribers to arrive at the online cancellation flow.<sup>1</sup>

25. The first way to reach the online cancellation flow is from the Match.com “Home Page.” Each page/step to cancel from the Home Page is described in more detail below:

### Home Page

26. If a Match.com subscriber is on the Home Page and wishes to cancel, it is easy for the subscriber to find the beginning of the online cancellation process.

---

<sup>1</sup> This report and my analysis are limited to Match.com’s online cancellation flow. I understand that Match.com offers other methods of cancellation, but I have not assessed those other methods because my expertise is in website usability and design.

27. The first thing a subscriber has to do, from any page, is to click the settings icon (the gear icon) on the

upper right-hand side of the screen and then click “settings.”

28. Many companies similarly put online cancelation flows on their settings pages. Thus, consumers are likely to expect the cancelation flow to be found on that page. Similarly, it is common to put the link to the settings page at the top right of the home page and to use a “gear” icon to indicate settings. Both are best practices, at least since 1995 as demonstrated in the Windows 95 menu in Figure 0 below.

29. Listed below are several websites that similarly place access to the cancelation flow on the settings page:

- i. LinkedIn—Subscription information is in Settings, which is at the top of the page, the third option from the right.
- ii. WorldatWork—The profile, which includes membership status, is on the right side of the navigation.
- iii. Canva.com—The settings icon is the third icon from the right in the navigation menu. Subscription information is within the settings.
- iv. Dropbox.com—The profile icon is in the upper right corner of the screen. Subscription status is nestled under settings and plan in the dropdown.
- v. NYTimes.com—The account is in the upper right-hand corner of the page, and subscription information is within the Account dropdown.
- vi. Netflix—Profile is in the upper right-hand corner of the page, and Account information (including subscription information) is within the dropdown.

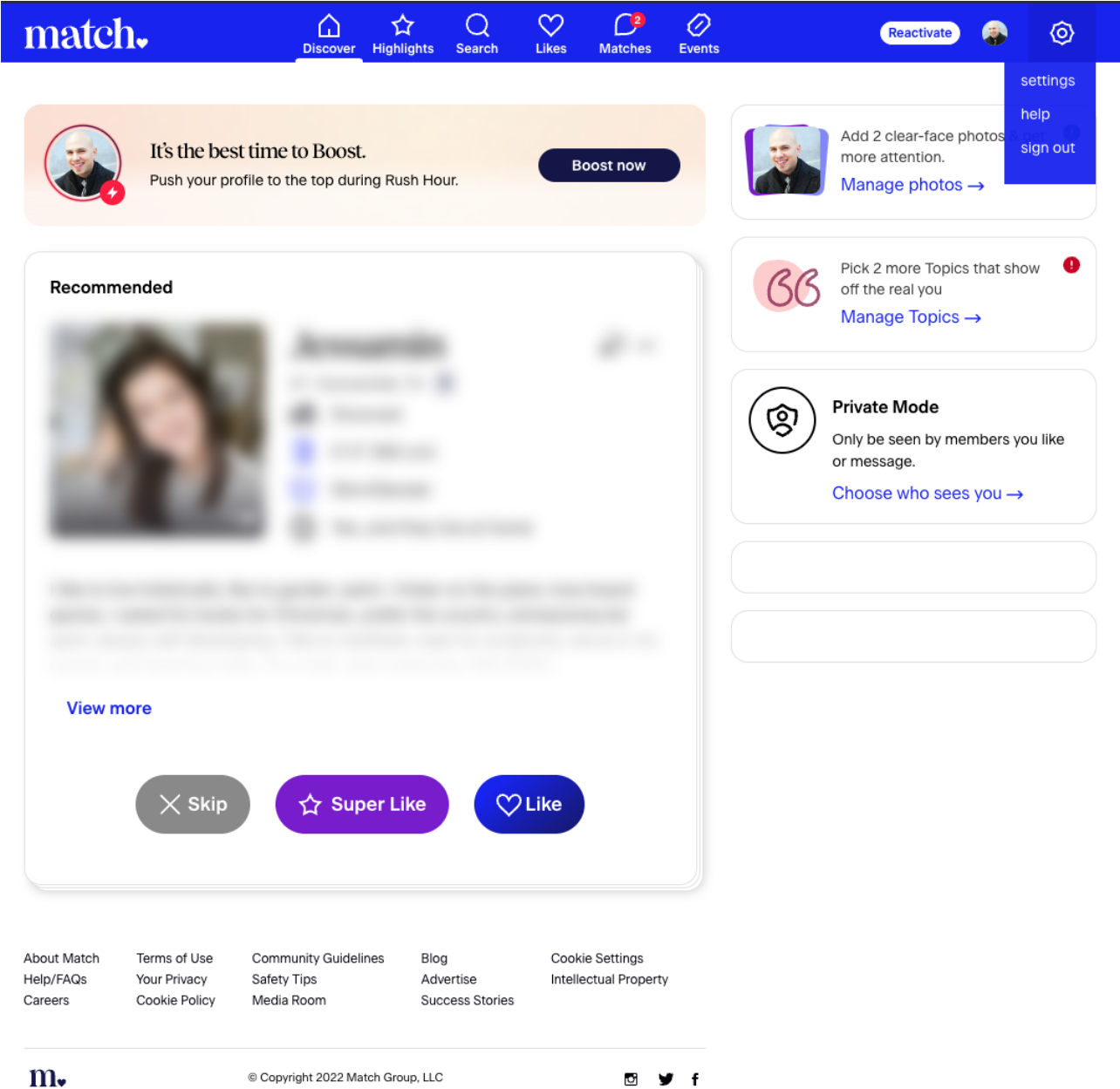
30. Match.com uses a gear icon for subscribers to access the Settings page. As described in more detail below, a gear icon is commonly used to represent Settings and has been since at least 1995, as observed in Windows 95 and potentially earlier. Some examples include other subscription and profile sites, such as Patreon, Facebook, YouTube, Google apps, Yahoo mail, iPhone, Android, and many others.

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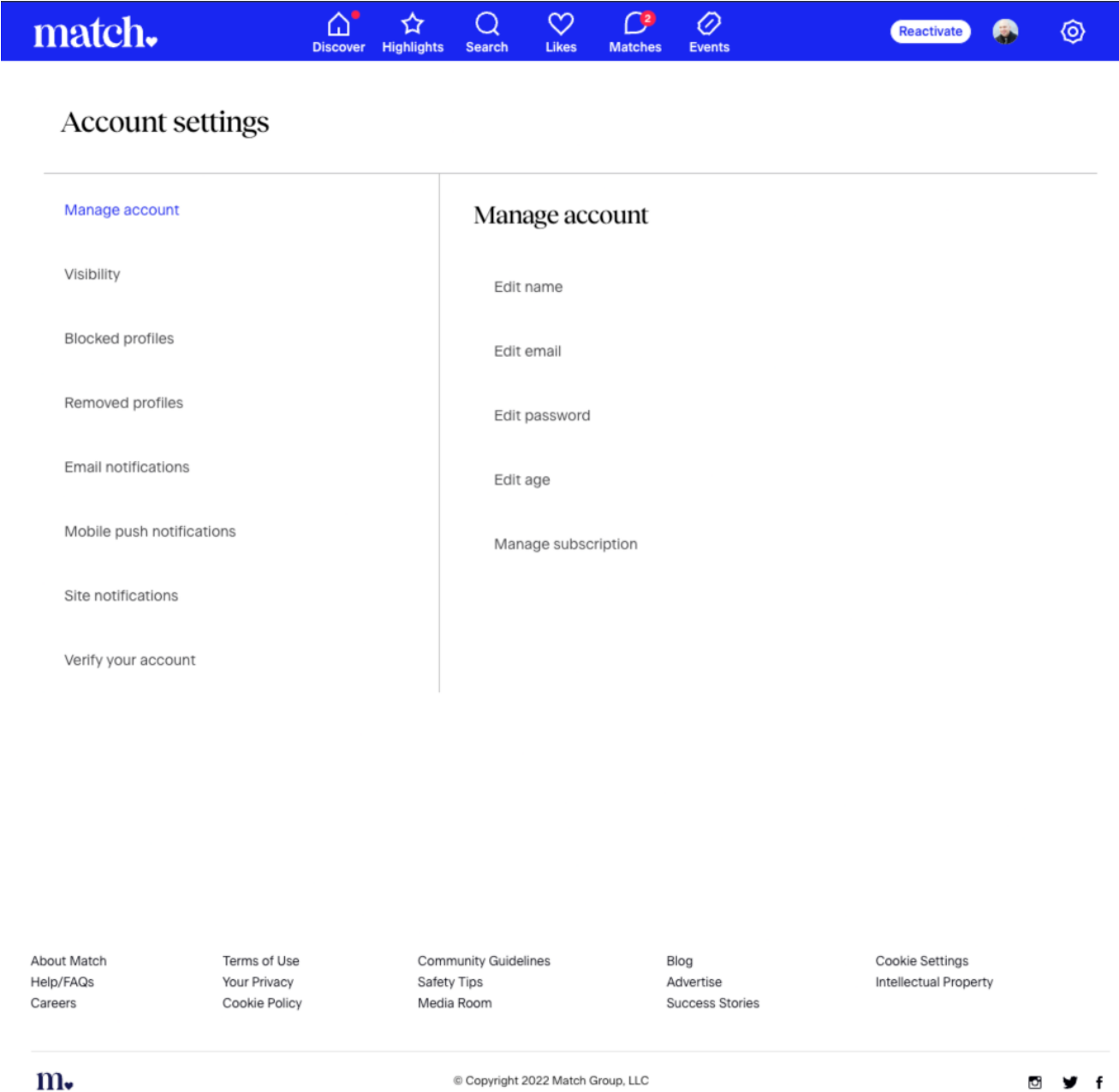


31. Once a subscriber selects Settings, Match.com takes the subscriber to the “Manage Account” section of the Settings menu by default.<sup>2</sup> To cancel from that screen, the subscriber must select “Manage subscription,” one of the five options on the “Manage Account” page.
32. It is obvious for any subscriber that wants to cancel their subscription that “Manage subscription” is the option to click. Match.com does not hide or obfuscate the Manage subscription link. Rather it has the same prominence as any other settings the subscriber may want to access. The location of the Manage subscription link (within Account Settings) makes sense and is not concealed or distracted from by other, more prominent user interface features or calls to action asking the subscriber to take any particular action.<sup>3</sup>

---

<sup>2</sup> In previous versions of the Settings page, “Manage Subscription” was located on the lefthand side of the page rather than as a submenu within the “Manage Account” section. “Manage Subscription” remained visible on the page at which a subscriber arrived after selecting Settings. This change does not affect my usability opinion.

<sup>3</sup> I understand the layout of and language on the Settings page has varied somewhat since September 2014. For example, the language to navigate to the Subscription Management page has changed from “Change/Cancel Membership” to “Manage/Cancel Subscription” to “Manage Subscription.” From a usability perspective, all of these options are acceptable alternatives, and in each version, a subscriber likely will recognize that canceling a subscription is a type of management, especially because the cancelation flow is unlikely to be located within any of the other Settings options. To the extent there is any confusion, a subscriber can visit the Help page, which, as described below, contains a “Canceling” article that links the subscriber to the flow, without navigating through the Settings options.



33. Once a subscriber clicks on "Manage subscription", they are prompted: "To continue, please supply your password." It is clear that if the subscriber wants to continue to cancel, they must enter their password and complete the reCAPTCHA (to prove the subscriber is not a robot).
34. I observed that reauthentication was only required once per log-in session. As far as I could ascertain sessions don't expire as long as the subscriber has accepted the appropriate cookies and doesn't log out. Meaning a subscriber could navigate away from the cancelation flow, then return later within the same session without having to reauthenticate. This reauthentication is common for platforms dealing with sensitive and financial data. Microsoft Windows 10 defaults to this setting. When an Apple macOS system is encrypted (called FileVault), it too requires the user to reauthenticate when booting up.
35. It is reasonable for Match.com to protect unauthorized or compromised system access to a user's billing and account information. Similar security checks can be found across many websites, as described in more detail below, particularly if a customer is attempting to reach personal account or billing information or make changes to their subscription. Facebook, a site with roughly 2.9 billion monthly users (Dean 2022) recommends reauthentication to their application developers as a method to circumvent hacking and loss of private data. "Re-authentication enables your app to confirm a person's identity even if it was verified previously. Facebook Login lets your app ask a person to re-enter their Facebook password at any time. You can use this to prevent cases where a user leaves a device logged in or where a third-party hijacks someone's session with your app." (Facebook n.d.) These checks ensure that only an authorized user can make changes to a subscription. This measure also helps to ensure that the subscriber doesn't make the change by accident, an issue that can arise when major changes can be effected with only one or two clicks.

36. Should a subscriber forget their password, a standard Forgot Password flow is provided, as depicted in Appendix F. I used this flow and it is virtually the same as every website requiring login, including every website I've ever designed.

Figure 3—Reauthorization

match.

Discover Search Likes Matches Events

Reactivate »

Limited-time only! Get 4x more views for FREE

START NOW

To continue, please supply your password.

The information you are about to view is private and requires your password to view it.

Please enter your password.

☐ I'm not a robot

reCAPTCHA

Privacy - Terms

CONTINUE

[Forgot your password?](#)

About Match  
Accessibility Help  
Terms of Use  
Your Privacy  
Ad Choices  
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Online Dating Safety Tips  
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Success Stories

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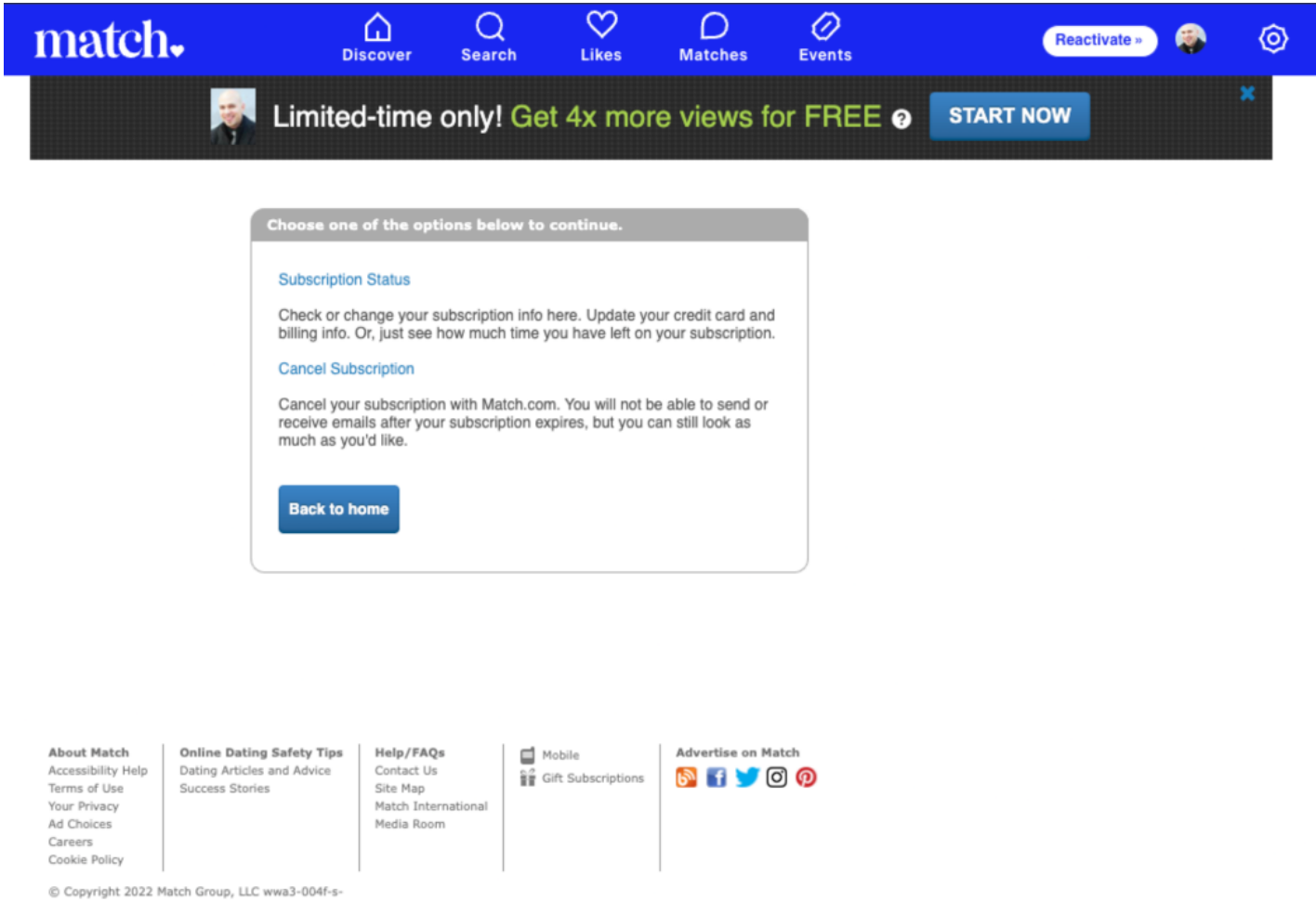
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37. Once the subscriber completes the security check, they reach the Manage Subscription screen. This screen only has two options: Subscription Status and Cancel Subscription. It is common to group Cancel Subscription with other Manage Subscription options, such as checking Subscription Status. Both options are clickable links (as shown by their blue color), which makes the title stand out. As indicated by research on the spotted pattern of screen reading,<sup>4</sup> the subscriber is likely to notice Subscription Status, Cancel Subscription, and Back to Home before reading any of the text.
38. Both of the links use plain, descriptive language, which makes the meaning of a link or button (i.e., what will happen if a user clicks on it) clear. If a subscriber wants to know what their subscription status is, they can click that button. But if a subscriber wants to cancel, they can click the “Cancel Subscription” button. Match.com could hardly make it more clear or simple to cancel.

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<sup>4</sup> Spotted Patterns are typically used when particular text is designed to stand out, and when the items that stand out resemble a word the user looks for to accomplish the current task. Thus, a user can accomplish the task without reading all of the text on the page if desired or can go back and read the text for additional information if necessary. “Text Scanning Patterns: Eyetracking Evidence.” August 25, 2019. <https://www.nngroup.com/articles/text-scanning-patterns-eyetracking/>.



39. After the subscriber clicks Cancel Subscription, they have entered the cancelation flow. The language on the first page makes clear the subscriber has not yet completed the cancelation process. The heading is “Before you go” (implying the subscriber has not yet “left”), tells the subscriber the last day of their subscription “*if* [they] cancel,” and presents an optional survey question, asking the subscriber why they “*are looking* to cancel” their subscription. (emphasis added). The survey has multiple choice options indicated by radio buttons.<sup>5</sup> Depending on which option (if any) the subscriber chooses, they may be presented with up to two additional follow-up questions on the same screen, although subscribers may be presented only with the single question on this page.
40. Below the question(s) are two buttons: Back to Home or Continue Cancelation. These two options have the same color and are in the same font. Both buttons also appear to be automatically sized based on the width of the text, with equal padding between the text and the edge of the button. Each of the buttons has a label that is clear and descriptive (either Back to Home or Continue Cancelation). If a subscriber wants to continue to cancel they can click the “Continue Cancelation” button.
41. The language throughout the page (including “Before you go,” asking why the subscriber is “looking to cancel,” and identifying the last day of subscription “if you cancel”) and the “Continue Cancelation” option make it clear that the cancelation has not yet been completed. The survey question itself is important from a business perspective because it gives Match.com important information about its subscribers’ experiences and whether improvements can or should be made. A brief survey such as this is quite common to encounter during the cancelation process. Companies often like to gather feedback

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<sup>5</sup> Radio buttons are common tools that allow a user to select one item out of a set of predefined options, meaning the user need not type or engage beyond a simple click.

at various stages to improve their members' experience, and a subscriber wishing to move through the process quickly could simply select answers as fast as possible (or not select answers at all) and move on within moments. Additionally, surveys asking for cancelation reasons are particularly important for websites like Match.com, where a subscriber might cancel because the service worked perfectly for them (by allowing them to find a match), or because the service worked poorly. It is helpful for a service like Match.com to have that information so it can make any necessary changes to improve the service. Presenting the survey after confirming the cancelation would likely decrease response rates and therefore make it more difficult for Match.com to improve its services for consumers.

match.

Discover


Search

Likes

Matches

Events

Reactivate »



Limited-time only! Get 4x more views for FREE ?

START NOW

Before you go, help us make Match.com better.

If you cancel, your last day of subscription will be 12/30/2022 and you will not be renewed.  
**You will continue to be billed every 2 weeks for the 2 remaining installment payments of \$32.31 (including tax) on your current subscription.**

What is the primary reason that you are looking to cancel your subscription with Match.com?

☐

I didn't receive enough replies to emails I sent out

☐

Other

☐

Not many people of interest initiated contact with me

☐

I had too much going on and did not have time to date

☐

Very few profiles piqued my interest

☐

I can't afford a subscription right now

☐

I met someone

☐

I didn't click with the matches I met in person

Back to home

Continue Cancellation

About Match

Accessibility Help

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Your Privacy

Ad Choices

Careers

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Online Dating Safety Tips

Dating Articles and Advice

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42. Depending on a variety of factors (such as the reason for cancelation and subscription history), a subscriber may be presented with a “save offer” after the first survey page. A “save offer” is an offer to renew the subscription (rather than cancel it) at a discounted price (e.g., 50% off the next renewal, or 3 months for the price of 1). Save offers are common in subscription service cancelation flows and are beneficial to consumers because they allow consumers to continue the service at a discounted rate if they desire to do so. Although the precise language has varied from September 2014 to the present, generally, the page presents the offer and then gives the subscriber two options: accepting the offer or continuing with the cancelation. Depending on the version of the flow, to decline the offer, the subscriber selects either “No thanks, I want to resign”, “Continue”, or “Continue Cancelation.” The current version uses the “Continue Cancelation” verbiage. In each version, the choice is clear: accept the save offer by clicking the button describing the offer (e.g., “Get 3 More Months”) or click the other button, declining the offer.

The screenshot shows the Match.com website interface. At the top is a blue navigation bar with the Match logo and icons for Discover, Search, Likes, Matches, and Events. A 'POWER UP' button is on the right. Below the navigation bar is a banner for 'Test RK - Free Event' dated December 31, 2022, with a 'VIEW ALL EVENTS' button. The main content area features a promotional message about finding love on Match.com, followed by a '50% off your next renewal' offer. The offer details that the user won't be charged the discounted price (\$51.14, including tax) until their next renewal date, after which the subscription will renew at the non-discounted price (\$102.27, including tax) until they cancel. Two buttons are present: 'GET 50% OFF 6 MONTHS' and 'CONTINUE CANCELLATION'. A success story photo of Angela & Layton is shown to the right. At the bottom, there is a footer with links for About Match, Online Dating Safety Tips, Help/FAQs, Mobile, and Advertise on Match.

match.

Discover Search Likes Matches Events POWER UP

match events JUST ADDED Test RK - Free Event December 31, 2022 | Arrive Test 515 Venue VIEW ALL EVENTS

James, sometimes finding love takes time. We truly believe you can find someone special on Match.com. After all, more relationships begin at Match.com than at any other site.

Give us another shot and we'll give you

**50% off your next renewal**

You have nothing to lose. You won't be charged the discounted price (\$51.14, including tax) until your next renewal date. At the end of your discounted 6 months, your subscription will automatically renew for the same package length at the **non-discounted price (\$102.27, including tax)** until you cancel, at any time, via your Account Settings page. By pressing the button below, you authorize us to charge your card upon each renewal. [Learn More](#)

Any add-ons that are a part of your subscription will renew at full price.

GET 50% OFF 6 MONTHS CONTINUE CANCELLATION

Not sure? Think about it and decide any time before the renewal date. [Search Now »](#)

Angela & Layton

These members gave it another chance. Now, they're a Match.com success couple!

About Match  
Accessibility Help  
Terms of Use  
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Careers  
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Online Dating Safety Tips  
Dating Articles and Advice  
Success Stories

Help/FAQs  
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Advertise on Match

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<sup>6</sup> MATCHFTC774790

43. The final screen before cancelation confirmation is a survey page with the heading “Tell us more,” asking the subscriber how likely they are to recommend Match.com to a friend (i.e., a Net Promoter Score survey, a common survey to gauge customer satisfaction).<sup>7</sup> The page also lists some of the benefits that the subscriber will lose by canceling (“If you cancel now, you will lose these benefits once your subscription ends....”). Reminding subscribers of benefits they will lose if they cancel is common on other subscription websites (e.g., Amazon Prime, LinkedIn).

44. Just like the first survey page, the second survey page contains two buttons: Back to Home and Continue Cancelation. Also just as with the first survey page, the language and the buttons on this page make it clear that the cancelation has not yet been completed, as the page warns “**If** you cancel now,” you **will** lose benefits (emphasis added), and the subscriber is given the option to “**Continue** Cancelation.” (emphasis added). Additionally, the current version of the flow warns that this page is “One last step,” making clear that there is still more to be done. A brief survey such as this is, again, quite common to encounter during the cancelation process and serves a business function. A subscriber wishing to move through the process quickly could simply select answers as fast as possible (or not select answers at all) and move on within moments.

45. There are a few important things to note about these surveys and potential save offers. First, they are quick and simple to complete (3 questions can be done in 10 seconds). Thus, they do not amount to an “unreasonable delay” that would be prohibited under the FTC guidance. Nor does Match.com use these

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<sup>7</sup> I understand that before some point in 2017, this page also contained a text box asking subscribers to answer the following question: “In your own words, how can we make finding love easier?” MATCHFTC672298. Entering text in the box was optional (just as answering any of the other survey questions is optional), and generally, it is beneficial to allow users to express opinions about the website. In my opinion, including the text box did not have an adverse impact on the cancelation flow’s usability or simplicity.



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surveys to confuse people into thinking they have canceled when they have not canceled. As explained above, Match.com uses clear language and buttons indicating to subscribers that they have not yet canceled until they have completed these surveys and questions. As described above, answers to these types of survey questions are particularly important for a service like Match.com, where cancellation does not necessarily reflect unhappiness with the service.

Figure 7—Question 2

The screenshot shows the Match.com website's cancellation survey. At the top is a blue navigation bar with the Match.com logo and icons for Discover, Search, Likes, Matches, and Events. A 'Reactivate »' button and a user profile icon are also present. Below the navigation bar is a dark banner with a profile picture of a man, the text 'Limited-time only! Get 4x more views for FREE', and a 'START NOW' button. The main content area has the heading 'Tell us more.' followed by the question 'One last step. How likely would it be for you to recommend Match.com to a friend?'. Below this is a horizontal scale from 0 to 10, with 'Not Likely' at the left and 'Very Likely' at the right. The scale consists of 11 radio buttons, with the first one (0) selected. Below the scale, a section titled 'If you cancel now, you will lose these benefits once your subscription ends:' lists three bullet points: 'You won't know who's viewed your profile', 'No more sending and responding to emails', and 'You risk losing your current monthly rate'. At the bottom of this section are two buttons: 'Back to home' and 'Continue Cancellation'. The footer contains several columns of links: 'About Match' (Accessibility Help, Terms of Use, Your Privacy, Ad Choices, Careers, Cookie Policy), 'Online Dating Safety Tips' (Dating Articles and Advice, Success Stories), 'Help/FAQs' (Contact Us, Site Map, Match International, Media Room), 'Mobile' (Gift Subscriptions), and 'Advertise on Match' (with social media icons). A copyright notice '© Copyright 2022 Match Group, LLC wwa3-004f-s-' is at the very bottom.

match.

Discover Search Likes Matches Events Reactivate »

Limited-time only! Get 4x more views for FREE START NOW

Tell us more.

One last step. How likely would it be for you to recommend Match.com to a friend?

◀ Not Likely Very Likely ▶

0 1 2 3 4 5 6 7 8 9 10

If you cancel now, you will lose these benefits once your subscription ends:

- You won't know [who's viewed your profile](#)
- No more [sending and responding to emails](#)
- You risk losing your [current monthly rate](#)

Back to home Continue Cancellation

About Match  
Accessibility Help  
Terms of Use  
Your Privacy  
Ad Choices  
Careers  
Cookie Policy

Online Dating Safety Tips  
Dating Articles and Advice  
Success Stories

Help/FAQs  
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46. The final screen in the cancelation flow is a cancelation confirmation page informing the subscriber the cancelation was successful and is now complete. The page states in prominent text near the top of the screen the cancelation is complete. The additional text provides more detail about what the subscriber can expect now they have canceled. It is common to provide a confirmation screen and sometimes a confirmation number as the final step of the cancelation process, so it is reasonable that a subscriber will understand they have successfully canceled if and only if they reach this page. Subscribers also receive an email confirming the cancelation, which is also customary when a subscriber has successfully canceled.

The screenshot shows the Match.com website interface. At the top is a blue navigation bar with the Match logo and icons for Discover, Search, Likes, Matches, and Events. On the right of the bar are a 'Reactivate' button, a user profile picture, and a settings gear icon. Below the navigation bar is a dark banner with a small profile picture of a man, the text 'Limited-time only! Get 4x more views for FREE', a question mark icon, and a 'START NOW' button. The main content area has a large heading 'Your subscription has been cancelled.' followed by several paragraphs of text: 'Your confirmation number is Brandon20221017165019763.', 'You do not have to do anything further to complete your subscription cancellation.', 'The last day of your subscription will be 12/30/2022. As a reminder, you will be billed \$32.31 (including tax) every 2 weeks for the remaining 2 installment payments on your current subscription. Use your last 74 days to contact any new members on Match.com. You never know when you're going to find the one!', and 'You will receive an email confirming your cancellation and containing pertinent information soon.' Below this text are two links: 'Reactivate my subscription' and 'Hide profile / deactivate my account'. At the bottom of the page is a footer with five columns of links: 'About Match' (Accessibility Help, Terms of Use, Your Privacy, Ad Choices, Careers, Cookie Policy), 'Online Dating Safety Tips' (Dating Articles and Advice, Success Stories), 'Help/FAQs' (Contact Us, Site Map, Match International, Media Room), 'Mobile' (Gift Subscriptions), and 'Advertise on Match' (with social media icons for YouTube, Facebook, Twitter, Instagram, and Pinterest). The footer also includes the copyright notice '© Copyright 2022 Match Group, LLC wwa3-001f-s-'.

match

Discover Search Likes Matches Events

Reactivate »

Limited-time only! Get 4x more views for FREE ? START NOW

## Your subscription has been cancelled.

Your confirmation number is **Brandon20221017165019763**.

You do not have to do anything further to complete your subscription cancellation.

The last day of your subscription will be 12/30/2022. **As a reminder, you will be billed \$32.31 (including tax) every 2 weeks for the remaining 2 installment payments on your current subscription.** Use your last 74 days to contact any new members on Match.com. You never know when you're going to find the one!

You will receive an email confirming your cancellation and containing pertinent information soon.

[Reactivate my subscription](#) [Hide profile / deactivate my account](#)

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**Online Dating Safety Tips**  
Dating Articles and Advice  
Success Stories

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**Advertise on Match**

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47. Overall, Match.com's cancelation process is easy to follow and use. At each step, it is clear what the subscriber must do to cancel online.

48. Match.com provides other ways to reach the cancelation page as well, for example, through the Help/FAQ page. The steps to cancel via this avenue, starting from the Home page, are described below:

1. Access the Help/FAQs page, either by selecting the "Help/FAQs" link at the bottom of nearly every Match.com page (including the Home page), by selecting "Help" within the Settings dropdown menu, or even by conducting an Internet search (e.g., via Google) for "Match.com help." A link to the Help/FAQs page is commonly located in the footer of a website, such as:
  1. LinkedIn – A "Help Center" link is near the bottom righthand corner of the Home page.
  2. Netflix – A "Help Center" link is along the bottom of the Home page
  3. NYTimes.com – A "Help" link is along the bottom of each page
2. The Help/FAQs page can be used in one of two ways: (1) using the search box, or (2) filtering by topic.
  - i. If the subscriber chooses to use the search box, they can search for "Cancel" (among other terms listed below) in the search box text entry field, which is prominently displayed in the middle of the screen. When a subscriber begins typing these terms the search box suggests related topics, e.g., "cancel" gets you "Canceling," and I found at least twelve various phrases that could get you to the same cancelation-related content. Alternatively, a subscriber can type "cancel" or a variation thereof and click the magnifying glass (a typical icon to represent "search") to run the search. The first search result is for a "Canceling" article, described in more detail below. These are the words/phrases I found that lead to the cancelation-related content:

1. Cancel
  2. Cancellation
  3. End
  4. Manage
  5. Manage account
  6. Manage subscription
  7. Auto renewal
  8. Membership
  9. Deactivate
  10. Free trial
  11. Turn off
  12. Subscription Status
- ii. If the subscriber chooses to filter by Help topic, they can select the “Manage My Subscription” help option on the Help/FAQs page, which is the topic most likely to contain information about canceling subscriptions. After choosing that filter, the page shows six articles, plus an option to “See all 7 articles.” After the subscriber selects “See all 7 articles,” the cancelation article option is displayed, which the subscriber can click to go to the relevant article.
3. Both of the paths described above, which are depicted in Appendix G, take the subscriber to the “Canceling” article that describes how to cancel a subscription and other various Match.com features, using a variety of methods. The first sentence of the article contains a “Manage Subscription” link that takes the subscriber to the same page as would clicking “Manage Subscription” from the Settings page, such that the subscriber is taken directly to

stands out as a link because it is underlined and the cursor turns into a hand when hovered over the link text.

4. The remainder of the cancelation flow from this point is identical to the flow if the subscriber enters via the Settings method described above.

49. A video of the cancelation process is being provided as Appendix J of this Report.

50. I also compared Match.com's cancelation process to the cancelation process for other major subscription websites. As indicated by the results of my usability study described in the next Section, most consumers have had other online subscription services and thus are familiar with standard cancelation processes. As the chart below shows, many of the features of Match.com's cancelation process are standard and used on many other websites.

	One-Step To Cancel	Cancel @ Account	Instructions in Help	Survey included	Retention Prompt Observed <sup>8</sup>	Reauthentication Required	5+ Steps to Cancel
<b>Match.com</b>	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Amazon Prime</b>	No	Yes	Yes	Yes	Yes	No	Yes
<b>Apple iCloud</b>	No	Yes	Yes	No	Yes	Yes	Yes
<b>Disney+</b>	No	Yes	Yes	Yes	Yes	No	Yes
<b>eHarmony</b>	No	Yes	Yes	Yes	No	Yes	Yes
<b>Intuit Quickbooks</b>	No	Yes	Yes	Yes	No	No	Yes
<b>LastPass</b>	No	Yes	Yes	No	No	No	No
<b>LinkedIn Premium</b>	No	Yes	Yes	Yes	Yes	No	Yes
<b>Netflix</b>	No	Yes	Yes	Yes	No	No	No
<b>New York Times</b>	No	Yes	No	Yes	Yes	No	Yes
<b>Spotify</b>	No	Yes	Yes	Yes	Yes	No	Yes

Screen captures for these flows are provided in Appendix I.

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<sup>8</sup> Based on my observations. May depend on the subscriber and the circumstances.

## VI. HEURISTIC ANALYSIS

51. This Section describes the heuristic analysis I conducted. I first identify each heuristic (in bold and quotes) and then analyze whether Match.com's cancelation process meets that heuristic.

### A. Heuristic 1: Visibility of system status

**"The system should always keep users informed about what is going on, through appropriate feedback within reasonable time."**

52. Match.com's cancelation flow satisfies this heuristic. As indicated in the screenshots and page descriptions above, at each step of the cancelation process, from the Settings screen, through to the end of the cancelation process, Match.com uses titles and text that clearly and succinctly describe what page the subscriber is on and what the subscriber is expected to do to proceed to the next step. The labels are clear and concise and use ordinary syntax.

53. I understand the FTC alleges the cancelation flow contains "misleading text" that causes subscribers to "think the cancelation is complete." FTC's First Amended Responses to MGI Interrogatory No. 2. I disagree that any of the text that the FTC identifies is misleading:

1. The FTC first contends the "Before you go" heading on the first survey page makes subscribers believe the cancelation is complete. I disagree. In my opinion, "before you go" indicates that the subscriber has not yet canceled. In other words, "before you go" means "before you cancel." In addition, linguistically, the phrase "Before you go" doesn't imply the completion of any task. In every use of the phrase "Before you go...", the context is clear that you haven't yet gone, meaning, you're still here. Other context on the same page reinforces the cancelation is not yet



complete. The first words after the “before you go” heading read “If you cancel...”. (See Figure 5).

Additionally, the survey question asks why “you are looking to cancel,” not “why did you cancel.”

This clearly indicates the subscriber has not yet canceled. Additionally, the navigation buttons on the page—one of which is “Continue cancelation”—indicate the subscriber still must take additional steps to cancel. Thus, I have no concerns from a usability perspective about Match.com’s use of the “Before you go” heading.

2. The FTC next claims that “until recently,” the save offer was confusing because it was unclear which button a subscriber should push if they want to decline the offer and continue cancelation. Again, I disagree. In all versions of the save offer page (which is only displayed to a subset of canceling subscribers), the two options are clear (either as a button or a hyperlink). One option clearly entails accepting the offer (usually by repeating the offer), and the other option clearly entails declining the offer. What is more, even if a subscriber were confused by the save offer, it is highly unlikely the subscriber was confused about *whether* they canceled.
3. I conclude that through clear language and buttons, Match.com does not deceive subscribers into thinking they canceled before they effectively cancel.

## B. Heuristic 2: Match between system and the real world

**"The system should speak the users' language, with words, phrases, and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order."**

54. I have concluded that this heuristic is satisfied. As explained below, Match.com's cancelation flow is written in plain and easy-to-understand English, at a 6th-grade reading level. The flow follows a natural and logical progression to cancelation, which is consistent with many web cancelation processes.
55. To analyze this heuristic, I used the Flesch Reading Ease Score (FRES) and a Flesch-Kincaid Grade Level Score (FKGLS), which are good measures for understandability and readability. (Character Calculator n.d.)
56. "The Flesch reading score is measured on a scale of 0 to 100, with 100 being the easiest to read. A lower score suggests that the language is hard to understand and may be suitable for only professionals." (Character Calculator n.d.)
57. "The Flesch-Kincaid grade level is a scale used to measure the readability level of books. It indicates the number of years of education needed to understand a text." (Character Calculator n.d.)
58. Based upon these scores, the language used in the Match.com cancelation flow has an average FRES of 71.1, which is "Fairly easy to read" and an average FKGLS of 6.06, which is "Easy to Read". These scores put the Match.com cancelation flow at a 6th-grade reading level. These scores indicate the flow meets Nielsen's criteria for heuristic 2, as well as ease of readability for adults.
59. Additionally, the information architecture, or how the content of the site is structured, makes logical sense and matches traditional user mental models for how and where items are located. In this case, canceling your subscription is available on the "Settings" page, which is a common and logical place to include information about account management (and has been for some time). See the chart above identifying other commonly used websites in which cancelation is done through the account settings page. On the Settings page, a subscriber finds the Manage Subscription button, which is a logical place

60. Upon selecting that option, the subscriber is presented with a survey question asking why he or she is canceling. If the subscriber chooses to answer the question, it's just a click of a radio button, or the subscriber can skip the question entirely. The subscriber may also choose to answer or skip the following survey question (a Net Promoter Score survey). At that point, Match.com displays a confirmation screen that the subscriber has successfully canceled. If the subscriber is shown a save offer, that is also a single page (between the two survey pages) requiring only a single click to accept or decline. This matches the organization and flows one might expect from other systems on the web.

c. Heuristic 3: User control and freedom

**"Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo."**

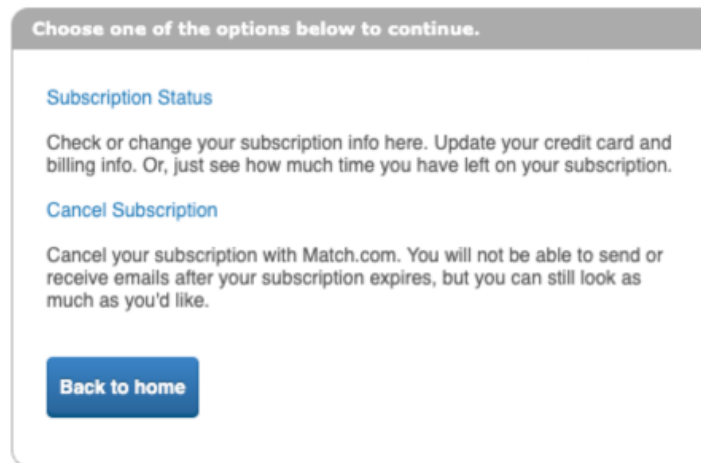
61. Based on my review, I conclude this heuristic is satisfied. Match.com provides at least two distinct paths into the cancelation flow—the first flow is through the Settings page, the second via the Help page. Whether a subscriber knows to go to Settings to manage their settings or they're not sure and they use the Help flow (which contains at least thirteen different routes to the "Canceling" article (twelve searches, one FAQ item) describing how to cancel and linking to the flow, as explained above), subscribers have ample entry points to find what they're looking for.

62. The Settings page also provides a clear entry point into the cancelation flow. Every iteration of the Settings page has presented the button to reach the cancelation flow (whether "Manage Subscription" or otherwise) on the first page that the subscriber sees. In the current version, there are eight options

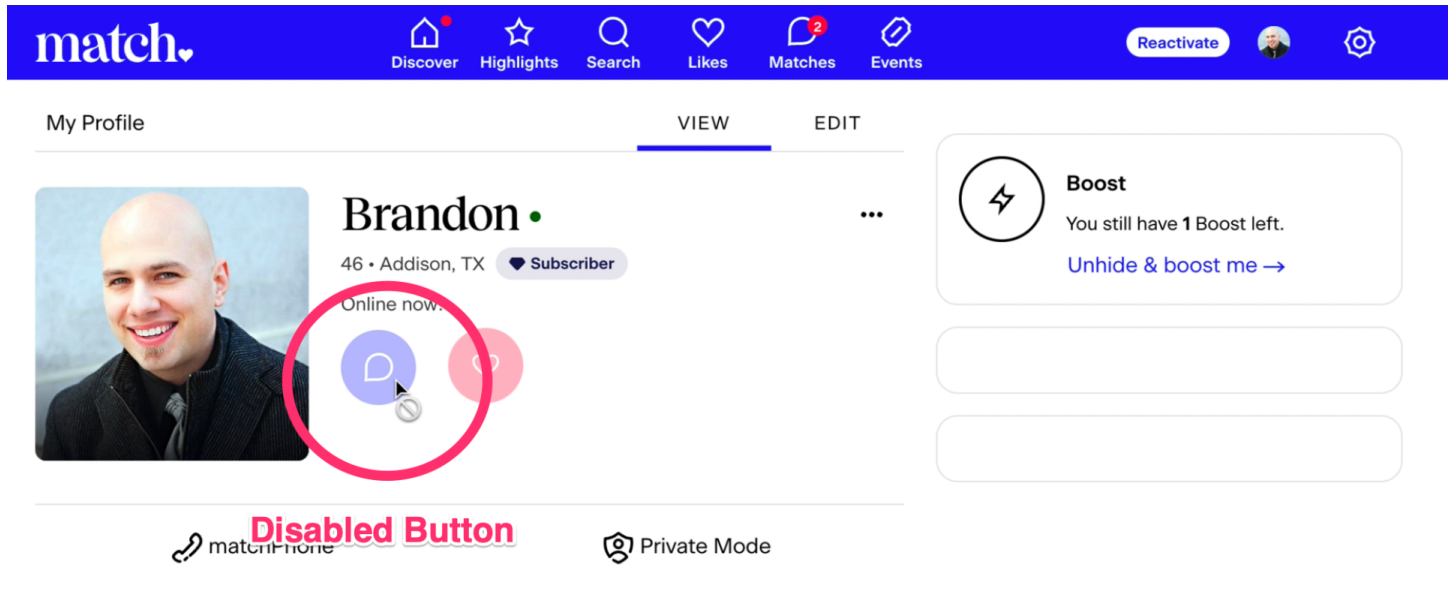
under Settings. In my testing, as well as in the usability study, Manage Account is the default menu, meaning the Manage Subscription sub-selection is immediately visible. The other seven menu options have no connection to the subscription in any way, though each of those options has as many as nine sub-options or even entire flows (e.g., Account Verification) under them. Manage Account has only five sub-options, each distinct, focused, and clearly labeled. If a subscriber wants to cancel, “manage subscription” is the clear and only choice to proceed (see Figure 9 below). This is true even though none of the options contain the word “Cancel.”

Account settings	
Manage account	Manage account
Visibility	Edit name
Blocked profiles	Edit email
Removed profiles	Edit password
Email notifications	Edit age
Mobile push notifications	Manage subscription
Site notifications	
Verify your account	

63. There are only two options under Manage subscription: Subscription Status and Cancel Subscription. Both are clearly labeled and supported with a descriptive paragraph.

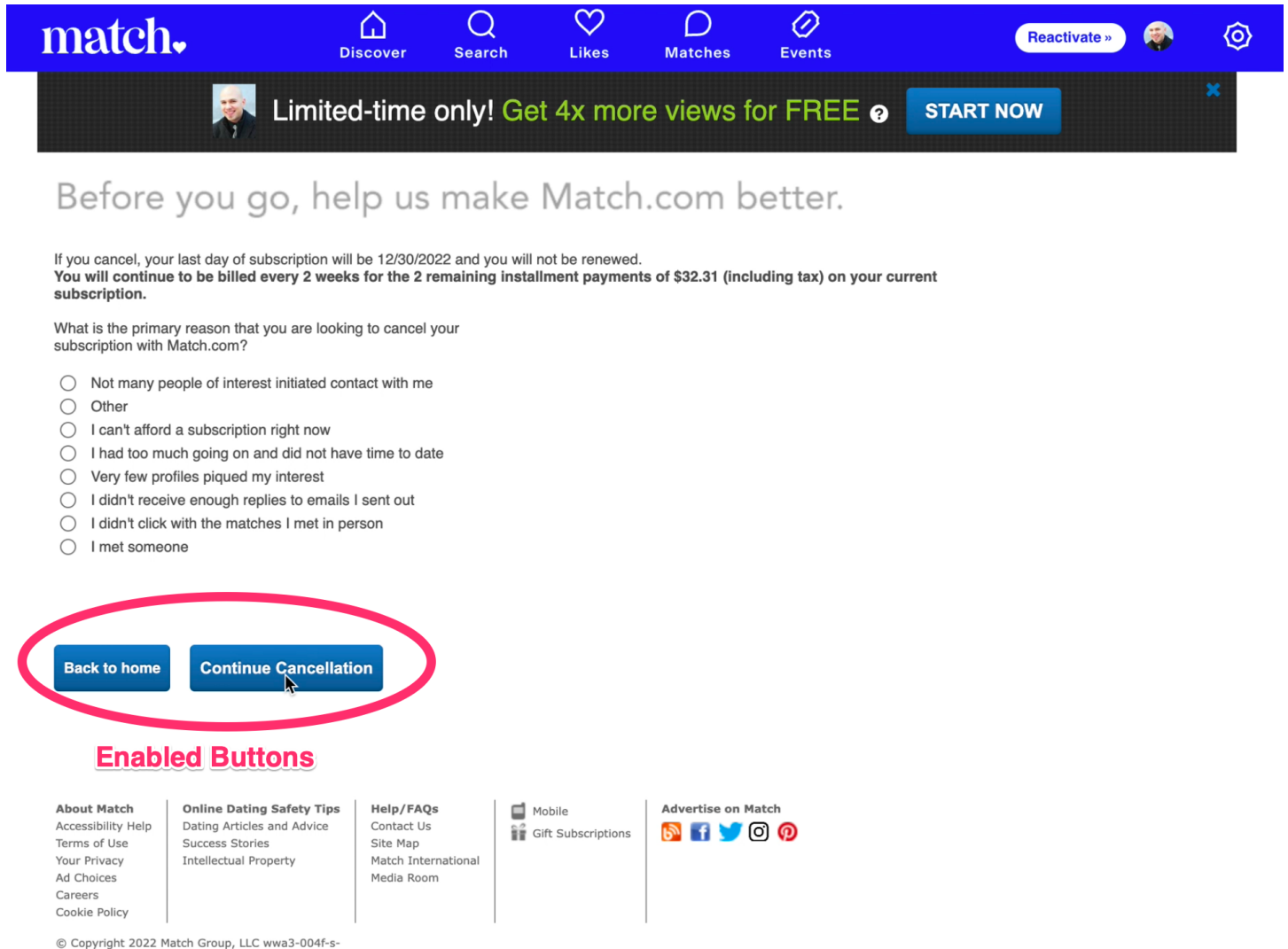


64. As subscribers navigate the Match.com website, if they make a mistake or go down an improper path, it is easy to continue exploring or retrace their steps using the browser back button or resetting to their home page to try again.
65. Once a subscriber finds the cancelation flow, there is a large button clearly and specifically labeled "Back to home" to help them reset should they get lost or decide to stop.
66. Likewise, should the subscriber prefer to continue, there is a large button clearly and specifically labeled "Continue Cancelation" to help them continue the cancelation process.
67. Both Back and Continue buttons are always enabled (as indicated by their solid blue color, used with other solid and bold colors elsewhere on the site), versus grayed-out or disabled buttons (as indicated by lighter or washed-out colors, and even a ban icon indicating it's not a clickable item). These facts are displayed in the figures below.



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Figure 12—Enabled Button Example



match.

Discover Search Likes Matches Events

Reactivate »

Limited-time only! Get 4x more views for FREE ? **START NOW**

Before you go, help us make Match.com better.

If you cancel, your last day of subscription will be 12/30/2022 and you will not be renewed.  
**You will continue to be billed every 2 weeks for the 2 remaining installment payments of \$32.31 (including tax) on your current subscription.**

What is the primary reason that you are looking to cancel your subscription with Match.com?

- ☐ Not many people of interest initiated contact with me
- ☐ Other
- ☐ I can't afford a subscription right now
- ☐ I had too much going on and did not have time to date
- ☐ Very few profiles piqued my interest
- ☐ I didn't receive enough replies to emails I sent out
- ☐ I didn't click with the matches I met in person
- ☐ I met someone

**Back to home** **Continue Cancellation**

**Enabled Buttons**

**About Match**  
 Accessibility Help  
 Terms of Use  
 Your Privacy  
 Ad Choices  
 Careers  
 Cookie Policy

**Online Dating Safety Tips**  
 Dating Articles and Advice  
 Success Stories  
 Intellectual Property

**Help/FAQs**  
 Contact Us  
 Site Map  
 Match International  
 Media Room

**Mobile**  
 Gift Subscriptions

**Advertise on Match**  
 RSS Facebook Twitter Instagram Pinterest

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#### D. Heuristic 4: Consistency and standards

"Users should not have to wonder whether different words, situations, or actions mean the same thing.

Follow platform conventions."

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68. The Match.com cancelation flow satisfies this heuristic because it uses consistent and well-understood language, images, and procedures. The location of all controls, both in the primary navigation at the top of the screen and the subsequent page-level navigation controls all follow established patterns of usability and clarity. If a Match.com subscriber has used any other websites requiring login and profile management, they're probably already familiar with the locations and patterns Match.com uses in its cancelation flow because they are all standard and generally accepted (and have been for years), as described in more detail above.

69. The primary way subscribers reach the cancelation flow is through the Settings page. I understand that the FTC has objected to the gear icon as the image for the settings menu. But the gear icon for the Settings menu is a standard and acceptable image. The Settings menu is indicated with the gear icon, which is a type of Toolbox navigation. (Kalbach 2007) The gear icon, like Match.com's other images, is commonplace and found on millions of websites and apps across the web, so subscribers are likely to understand that the gear icon signifies Settings. As mentioned before, the gear icon has been used for Settings as early as 1995 in Windows 95, and countless systems and sites since. Some examples of systems and websites that use the gear icon for settings are:

1. Apple macOS (desktop)
2. Apple iOS (mobile)
3. Microsoft Windows
4. Microsoft Office 365
5. Amazon
6. Gmail
7. YouTube

8. Reddit

9. Twitter

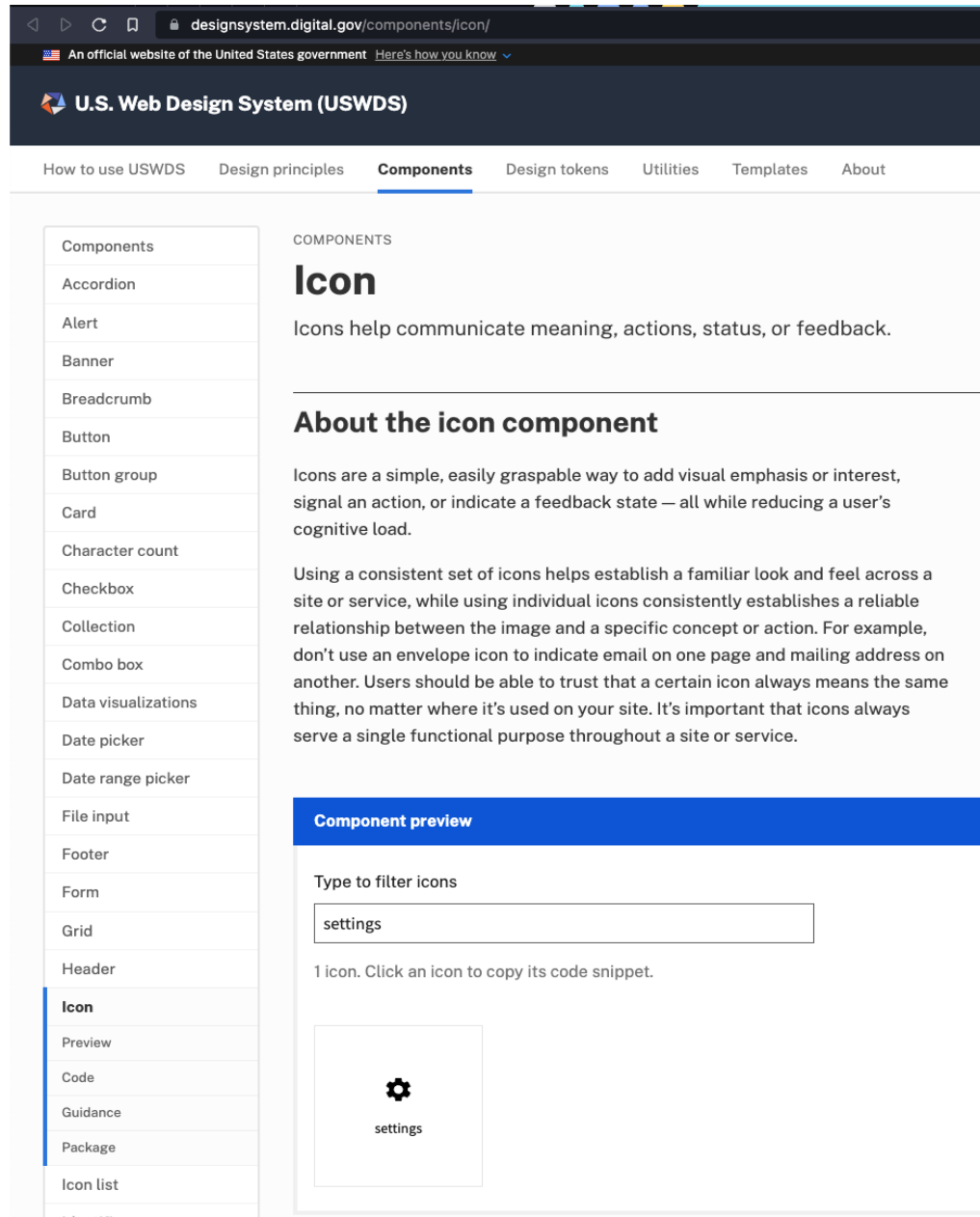
70. A Google Image search for “settings icon” returns almost exclusively the gear icon, which is by far the most used icon for settings. This is depicted in Figure 13 below.



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recommends using a gear icon for settings. (U.S. Web Design System n.d.). This is shown in Figure 14 below.

Figure 14—Digital.gov search result for settings icon



72. Once a subscriber enters the cancelation flow from the Settings (or Help) page, the navigation buttons are standard. Match.com includes "Back to home" and "Continue Cancelation" buttons placed in their standard locations at the bottom left of the content area of these functional pages. The buttons are not hidden or obfuscated. They are large, easily visible, and the text can be clearly read. Their use of taking you home, or continuing cancelation, is consistent with their labels and standard navigation conventions.

73. Finally, any paid subscription service needs to understand why a subscriber might choose to cancel. That information is particularly important for services like Match.com because cancelation does not necessarily mean that the subscriber is unhappy with the service, so the reason is important to know so that Match.com knows how to react. For example, a subscriber may choose to cancel because Match.com helped them find their new partner—in which case the Match.com service performed well—or perhaps they couldn't find anyone—in which case Match.com might want to improve the service. Both are important to know, and generally, subscribers want the service providers to know if the platform worked for them or not. (Gingiss 2019). Match.com includes a simple, optional survey to ask subscribers why they are canceling. The subscriber doesn't have to answer these simple questions, but it's not a large request to ask for clarity regarding the reasons for the cancelation or satisfaction with the service.

#### E. Heuristic 5: Error prevention

**"Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action."**

74. Match.com's cancelation flow is designed in a way that eliminates common errors and includes steps to help make sure a subscriber does not commit to an irreversible action by error. Of course, no system is perfect for every user, so this is not to say a system needs to have a 100% success rate at all times for every person in order to be "simple." That would constitute an unreasonable and likely impossible requirement.
75. The focused flow and clear navigation controls have only two options "Back to home" or "Continue Cancelation," which help prevent errors at every step.
76. When the subscriber is prompted for optional additional feedback regarding their experience, the options are presented in single-selection-only controls called radio buttons, meaning the subscriber need not type or engage beyond a simple click. This helps minimize errors. Even when selecting an option that prompts the subscriber with one or two follow-up questions, these are also presented with radio buttons. Still, each is optional and is not a required step to continue canceling. The subscriber can merely skip the question and click Continue Cancelation.
77. To simplify and clarify things, Match.com also breaks the cancelation process into several steps. This is a useful design pattern used to minimize errors by helping ensure only subscribers that truly want to cancel, actually do cancel. If Match.com used a "one-click" cancelation feature, that would likely be far more prone to erroneous cancelations and would be a poor design choice. Cancelation of a subscription is sometimes difficult to reverse, and it is, therefore, reasonable to break the cancelation process into a small number of simplified steps to minimize errors.

F. Heuristic 6: Recognition rather than recall

**"Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate."**

78. Match.com's cancelation flow satisfies this heuristic. Each action and object are clearly visible.

Match.com does not require the subscriber to remember information from one section to the other.

Match.com includes clear and obvious instructions throughout.

79. As subscribers begin the cancelation flow, clarity of language and clear, obvious labels lead them down the path. And again, when subscribers are prompted for optional additional feedback regarding their experience, the options are presented in single-selection-only controls called radio buttons, meaning the subscribers need not type or engage beyond a simple click.

80. The text and headings on each screen are clear and discrete, indicating to subscribers what they are doing, and the consequences of moving forward along either path.

G. Heuristic 7: Flexibility and efficiency of use:

**"Accelerators—unseen by the novice user—may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions."**

81. This heuristic is satisfied two-fold. First, novice users like myself as well as 91.5% of our tested novice users in the study were able to cancel successfully. Having done it the first time with little to no experience with the website is a key indicator of good usability. If novice users can find and accomplish

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the task at least once, the chances of being able to replicate it again and again approaches the near 100% success range historically. In the case of Match.com, should people cancel then resubscribe, it's clear from the usability test data they would then be much more likely able to cancel on subsequent attempts.

#### H. Heuristic 8: Aesthetic and minimalist design

**"Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility."**

82. Based on my review of the cancelation flow, I did not identify any irrelevant or unnecessary information.

Each piece of information provided to the subscriber was clear, relatively concise, and easy to understand.

83. Once the subscriber has entered the Manage Subscription page, the options and paths become clear, limited, and obvious. Besides standard banners, header, and footer navigation, the subscriber's focus is entirely on the page content with its navigation options to either manage their subscription or cancel it.

84. As the subscriber proceeds to cancel, minor additional instructions and clarifying content are introduced as gates to ensure the subscriber is aware of what they're doing and the consequences (see Heuristic 5, Error Prevention). The subscriber is prompted with optional feedback questions in simple, plain radio button forms, with clear calls to action to either return home or continue canceling. Heuristic 8 is satisfied.



I. Heuristic 9: Help users recognize, diagnose, and recover from errors

**"Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution."**

85. I did not see any error messages in the cancelation flow either through my testing or through the empirical tests that I describe below. Thus, there was no opportunity for any error message to be in codes.

86. Match.com makes it easy for a consumer to recover from any error, by returning home and beginning again, or using the back button in the browser.

J. Heuristic 10: Help and documentation

**"Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large."**

87. Match.com satisfies this heuristic as it provides documentation and instruction on how subscribers can cancel. As described earlier, subscribers may enter the cancelation flow by directly navigating to their Settings page, or through the Help page. Help is available from the gear menu where the user also found Settings, or from the footer on virtually every page, as shown in, for example, Figures 1-8 above.

88. If subscribers choose Help, there are at least thirteen paths that lead directly to detailed instructions on how to cancel. Those instructions are provided in Section V above. Images for this flow are included in [Appendix G](#).

#### K. Conclusion: Nielsen's 10 Heuristics

89. In conclusion, for the reasons explained above, Match.com's cancelation flow satisfies all 10 heuristics. Based upon this analysis, in my expert opinion, the flow meets best practices for web usability and simplicity.

#### L. Nielsen's Usability Components

90. I next analyzed whether Match.com's cancelation flow meets the five quality components of usability defined by Nielsen: learnability, efficiency, memorability, errors, and satisfaction. As explained below, I conclude that Match.com's cancelation process satisfies each of these five quality components or is inapplicable.

#### M. Learnability

91. The cancelation flow is simple and easy to use, as described above. From my experience in usability and design, it should not require any learning to use. Even so, Match.com provides learning opportunities. First, the format, color, and approach for the cancelation are similar to what Match.com uses for sign-up and generally throughout the site. Thus, subscribers will learn by using the website how to approach cancelation. Plus, the Help documentation provides additional opportunities for subscribers to learn how

to cancel. Overall, the information architecture (how the information is combined hierarchically in relation to other information) is standard and follows common, established paradigms.

#### N. Efficiency

92. The Match.com cancelation process is efficient. Because it includes a limited amount of information during each step of the process, the information is quickly scannable, not even requiring full reading or comprehension before moving to the next step. Common keywords like "subscription", "cancel", and "continue" are all present and in clear, legible text. This makes the scanning of each page quick, allowing the subscriber to efficiently move on to the next step.
93. In addition, there are not many steps to cancel and as explained below, subscribers can cancel quite quickly, typically in less than 2 minutes. That is efficient.

#### O. Memorability

94. Even though memorability would not necessarily be a requirement for this process, as subscribers don't often perform cancelation tasks many times repeatedly in a short time frame, the core elements of Match.com's flow are easily retainable due to their straightforward nature, and the small number of steps. I canceled several times to test memorability. While the first time took me 3 minutes to cancel (longer than it would normally have taken me as I was also recording and carefully noting my observations, whole-screen overviews, and overall experience), my subsequent cancelation attempts only took about 30 seconds. This shows that the process is memorable.
2. There are also memory advantages because the cancelation process is like the sign-up process. What subscribers learned from the sign-up syntax and scheme will help subscribers cancel easily.

## P. Errors

95. There are limited places for errors in the cancelation flow. The first place a subscriber might encounter an error is not being able to find the beginning of the cancelation flow. In this case, there are two major places subscribers can start, Settings or Help. Both are straightforward and clear about where to go next. The language of Settings includes an option "Manage subscription" (on the screens I tested on, it was located dead center of the screen and the first text to catch my eye due to its placement at the end.) It was the first place a subscriber is likely to look for anything regarding subscriptions, including canceling. Upon review of the other options, it is even more obvious that "Manage subscription" is the correct beginning to the flow, as the other options have nothing to do with cancelation.
96. If a subscriber chooses to search for the cancelation feature via Help, the process is also straightforward. Whether they choose to search for "cancel" and select its auto-complete prompt, or choose one of at least twelve different search terms resulting in cancelation-related content and click Search, or select the "Manage My Subscription" Help topic, the subsequent screens direct and guide them to the same "Manage subscription" feature to help them begin canceling.
97. Once a subscriber selects "Manage subscription," the flow to cancelation completion is straightforward and clear. The only place a subscriber could potentially err is in forgetting their own password (which they had used to log in initially, they might even have stored in a password manager that automatically fills in the password, or they can retrieve via the simple Forgot Password flow), or choosing the option "Subscription Status" instead of the only other option, "Cancel Subscription." The likelihood of committing errors on that screen is extremely low. After that, the flow doesn't fork. The subscriber can end the process by clicking a "Back to home" button or simply continue by clicking the large, blue "Continue Cancelation" button. The only other option the subscriber has is choosing a save offer, if

presented with one, but as described above, the options on the save offer page are clear and

straightforward, and a subscriber is unlikely to be confused.

98. On the follow-up question screens, there is no text indicating at this stage that the subscriber's subscription has been canceled, only instructions regarding when the last day of the subscription will be *if* the subscriber cancels, and a warning that the subscriber will continue to be billed according to the subscription agreement. Both on this step and the subsequent second question, there is no indication the cancelation is complete yet, and the large blue button reads "Continue Cancelation" indicating there is more to follow, making errors unlikely at this stage.
99. Only when a subscriber successfully finishes the cancelation process does the large text at the top read "Your subscription has been canceled." If a subscriber skips that header and reads the content below, it begins with the text "Your confirmation number..." and "You do not have to do anything further..." Thus, all three separate lines of text confirm to the subscriber that they've successfully canceled their subscription. Additionally, the subscriber receives an email confirmation of cancelation, which is common. The failure to see a confirmation page or receive a confirmation email should indicate to the subscriber that the cancelation may not have been completed.
100. In summary, even if subscribers were to experience a navigation error, they're easily recoverable, and any errors would continue to redirect them back to the proper cancelation path.

Q. Satisfaction

101. Overall, the cancelation flow meets the requirements of satisfaction. The language, fonts, layout, and overall aesthetics are clear, legible, and obvious. I found no issues with any of these characteristics.

102. Based on the foregoing heuristic analysis, in my expert opinion, the Match.com online cancelation flow is simple, i.e., clear and effective.

103. Although my above analysis focused primarily on the current version of Match.com's online cancelation flow, I understand that there have been some changes to various Match.com pages since September 2014. Those pages are no longer on Match.com's live website, but I reviewed videos and/or screenshots of past versions of those pages. Reviewing those versions does not change my opinion that all versions of Match.com's online cancelation flow since at least September 2014 have been simple.

## VII. USABILITY STUDY SUMMARY

104. To test the results of the heuristic analysis described above, I designed and conducted an empirical study of actual consumers who are within the applicable universe of potential Match.com subscribers. The objective of this study was to empirically test whether Match.com's cancellation process was simple or not. The full study methodology is provided in [Appendix C](#), and the raw data is provided in [Appendix H](#). I briefly describe the study methodology and then report on the results below.

### Study Methodology

105. I used the web platform UserTesting.com to host the study and recruit participants from its panel. The basic design of the study was simple. UserTesting.com recruited a cohort of representative potential users of Match.com. I asked the participants to sign up for a Match.com subscription. I then asked the participants to cancel their Match.com subscription. For this study, I used Match.com's actual live website, so it was a real test for what subscribers actually see and do under real-world conditions.

106. I then analyzed several objective criteria to determine whether the cancellation process was simple:

1. What percent of participants who signed up were able to cancel? If the process were simple, I would expect that a significant percentage of subscribers (more than 80%) would be able to complete the task of cancellation.
2. How long does it take for participants to cancel? If the process were simple, I would expect that canceling would not take more than a few minutes.

3. Does it take longer for participants to sign up for a subscription (including both registration and completing the purchase process) or to cancel their subscription? If the process were simple, I would expect that it would take more time to sign up than to cancel.

107. I also sought to analyze whether participants subjectively perceived the cancelation process to be simple. To conduct this analysis, after the participants attempted to sign up and after they attempted to cancel, I asked them to rate the task on a standard 1-5 scale of simplicity/difficulty.

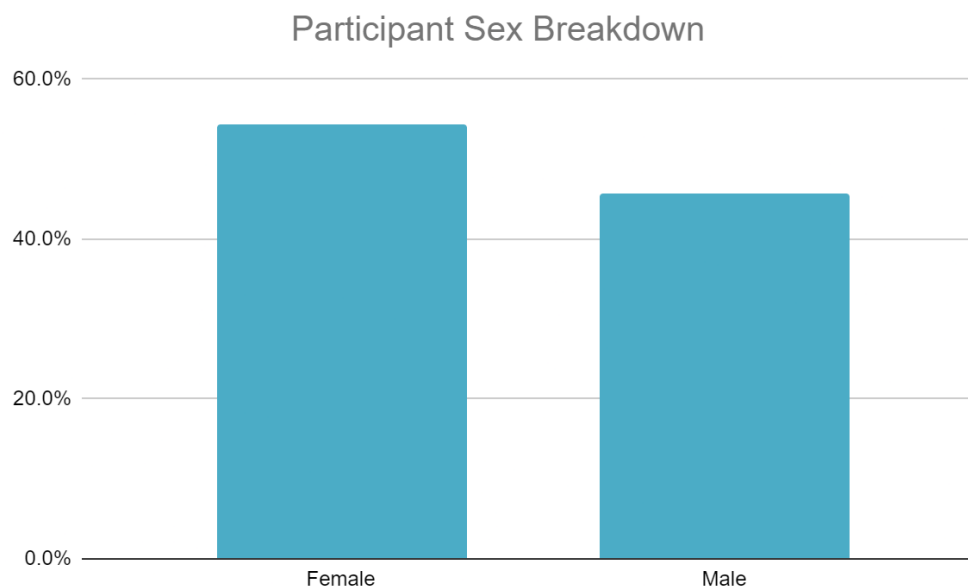
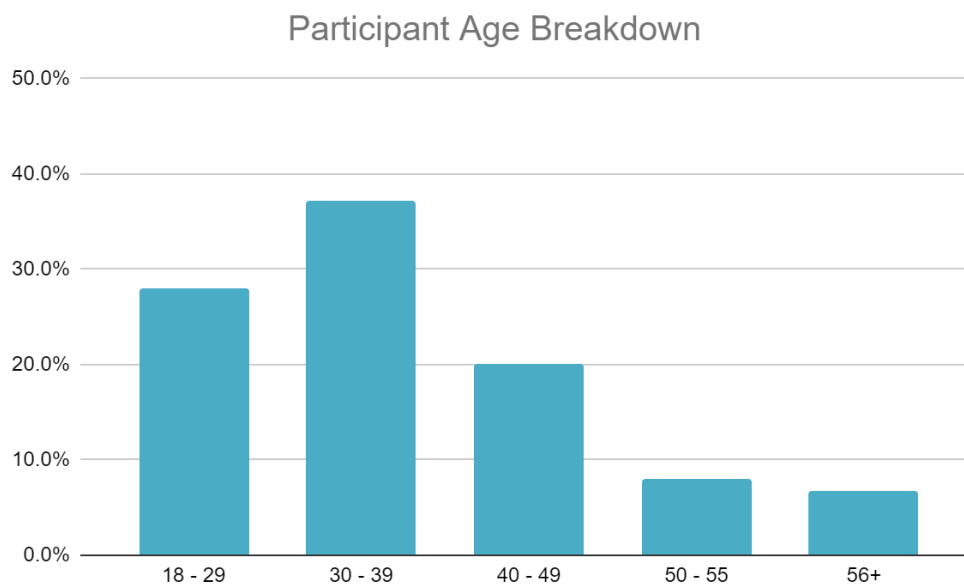
1. How do participants perceive the cancelation process? If it were simple, I would expect most respondents to rate the process as simple.
2. How does the signup process compare to the cancelation process in perceived difficulty? If the cancelation process were simpler, I would expect more participants to say so.

### Study Participants

108. UserTesting.com recruited 233 participants. 69 were screened out because they were unable to sign up for a Match.com subscription. The reason for the 69 failures was the limitations of the study parameters. To minimize potential fraudulent use of our virtual credit cards, we had to limit the credit limit on each card to \$50. This meant participants were required to select a very specific subscription type and payment option (all carefully described in their task instructions). If participants failed to select the appropriate options, they were unable to subscribe, and failing to subscribe meant these participants were unable to even attempt the second task of canceling due to their accounts not having an active subscription. They were then excluded from the final study counts as anyone who failed to subscribe would not be a potential candidate for canceling a subscription. All results and charts in this report therefore are from a total participant count of 164. The charts below show the age and demographic

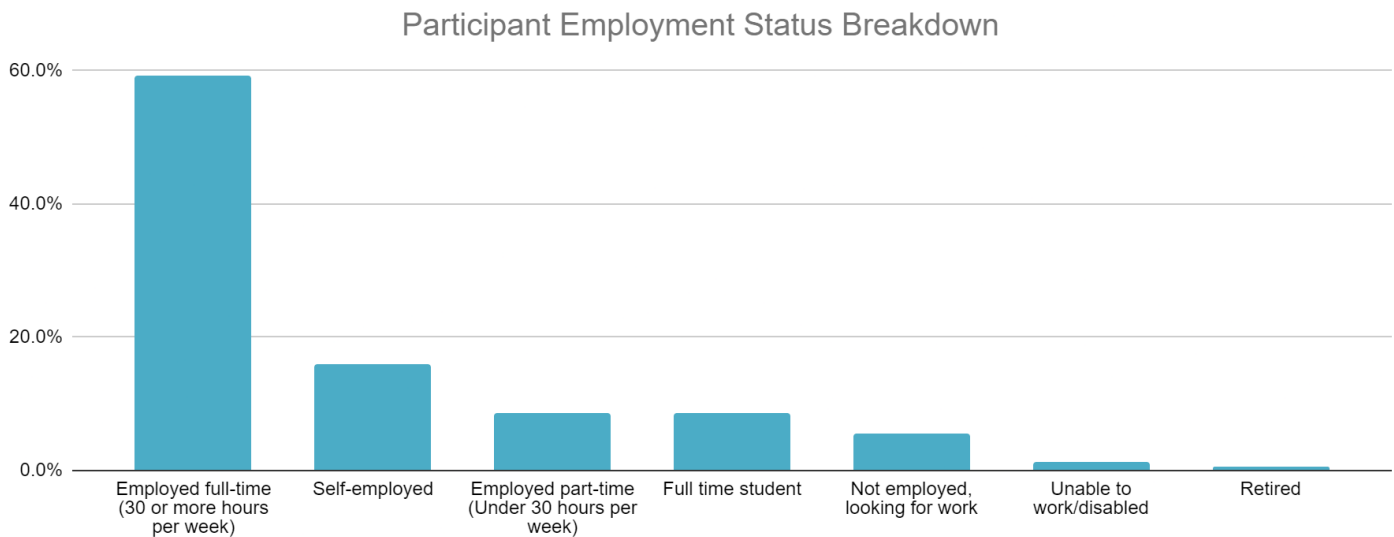
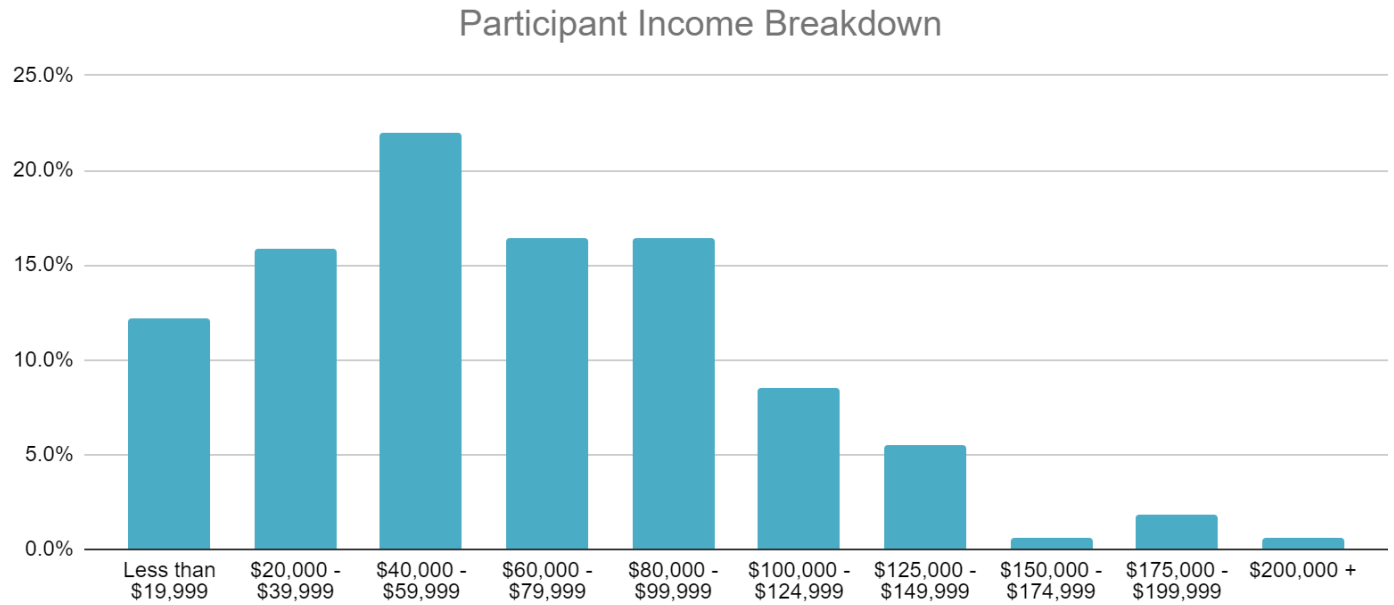


demographic distribution.



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109. One challenge of this study was that I needed to provide a credit card so participants could sign up on Match.com without using their own cards. To do this, I provided participants with access to a virtual credit card set up by my firm, Precocity, that could be used to subscribe to the live Match.com

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site. By using real money on the real website with first-time Match.com users, we were able to see firsthand how real users might perform in their attempts to subscribe and cancel. At the same time, because the participants did not use their own money, they arguably had less of an incentive to ensure they successfully canceled. So if anything, my usability study is conservative, as the percentage of people able to successfully cancel if their own money is at stake may be larger than that reflected in my usability study.

## Confidence Interval and Statistical Analysis

110. A confidence interval level refers to the long-term success rate of the method. It indicates how often this type of interval will capture the parameter of interest. You've probably heard surveys and polls say things like "This number is accurate plus or minus 1%". That margin of error is derived from the confidence interval. A specific confidence interval gives a range of plausible values for the parameter of interest. A 90% confidence level is the benchmark commonly used for user experience design usability tests. However, for this study, I used a higher and stricter 95% confidence level so I would have greater certainty of the results found.

### A. Summary of Results

111. Overall, this study demonstrated the Match.com cancelation process is simple. Canceling on Match.com is as simple or simpler than comparable subscription sites and it is simpler for subscribers to cancel than it is for them to sign up. The high rates of successful cancelation, above-average SUS scores, and participant feedback all indicate that the Match.com online cancelation process is simple. The quantitative highlights are:

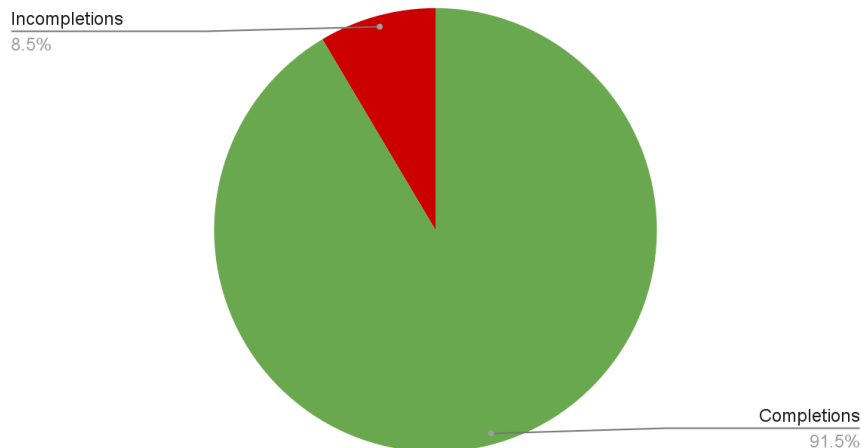
- **91.5%** of participants who signed up were able to cancel successfully

- It took participants an average of **74 seconds** to cancel on Match.com
- Participants were able to cancel much faster than they were able to sign up—Average Cancellation was **16.3% of the time** it took to sign up, or **6.1 times faster**
- **84.7%** of participants thought canceling was at least as simple as signing up
- **88.3%** of participants thought canceling was simple or were at least neutral as to the simplicity/difficulty
- Match.com received an “A Grade” on a System Usability Score (**81.6**), which makes it among the top 10% of all websites in terms of usability

## B. Cancel Success Rates

112. Overall, 91.5% of participants that subscribed were able to cancel. If the cancellation process were not simple, we would see a far lower success rate on this task. A study conducted by Dr. Sauro of 1189 tasks taken from 115 usability tests from 3472 users indicates “...the average task-completion rate is 78%”. (Sauro 2011b) This means the cancellation task completion rate of 91.5% is better than 71.8% of all usability tasks on average and is only .5% shy of being in the top quartile. The figures below provide this data.

Cancelation Completion Rate

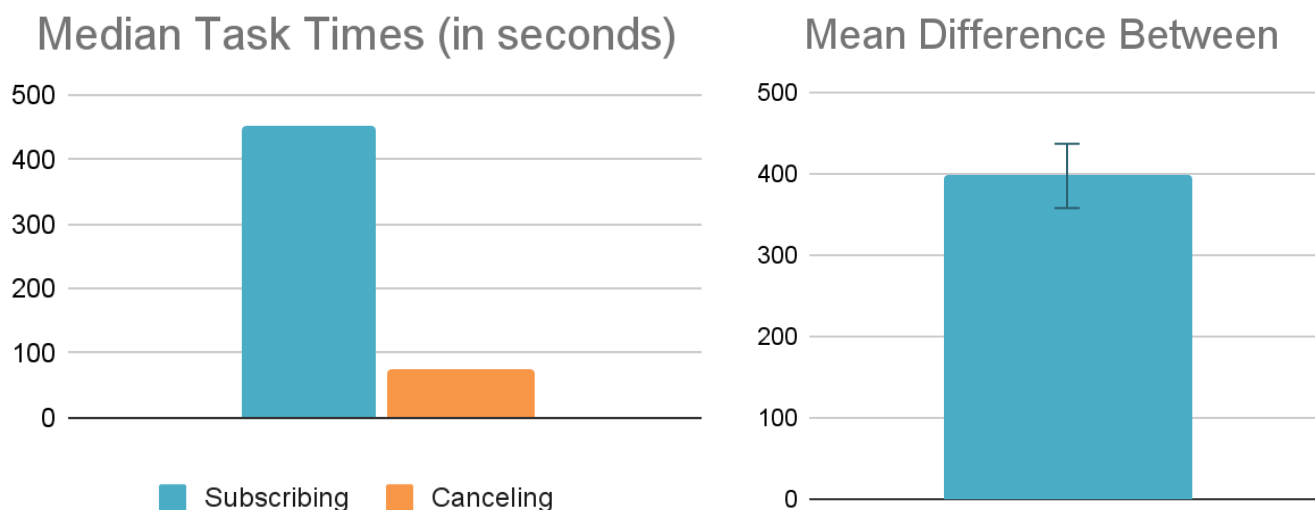


Total Completion Lower Limit	Total Completion	Total Completion Upper Limit	Incompletion
86.1%	91.5%	94.9%	8.5%

## Time To Complete Each Task

113. I next analyzed how long it took the participants to complete the subscription task and the cancelation task. There was a notable and statistically significant difference in task time between subscribing and canceling. It took participants on average just over one minute (median task time of 74 seconds) to cancel their subscriptions. The relatively short time it took participants to cancel suggests they made few (if any) “errors” they had to recover from by backtracking, and instead likely were able to proceed directly and quickly through the cancelation flow.

114. It took participants much longer to subscribe—a median of 453 seconds. For task time, it is common practice to use median rather than mean, the common understanding of an average, to estimate the center of the population. Thus, participants could cancel in just 16.3% of the average task time it took to subscribe. Participants were on average able to cancel in 83.7% less time than it took to subscribe. The figures below summarize this data.



Subscribing		
Task Time Lower Limit	Median Task Time	Task Time Upper Limit
400 sec	453 sec	484 sec
Canceling		
Task Time Lower Limit	Median Task Time	Task Time Upper Limit
64 sec	74 sec	81 sec

c. System Usability Scale (SUS) Scores

115. After each testing session, participants were asked a series of questions that are part of the System Usability Scale (SUS) survey.
116. According to the government website usability.gov, the SUS “provides a ‘quick and dirty’, reliable tool for measuring the usability.” The SUS “consists of a 10-item questionnaire with five response options for respondents; from Strongly agree to Strongly disagree. Originally created by John Brooke in 1986, it allows you to evaluate a wide variety of products and services, including hardware, software, mobile devices, websites and applications.”

117. As usability.gov explains “SUS has become an industry standard, with references in over 1300

articles and publications.”

118. Based on research by Jeff Sauro, Ph.D., a SUS score above 68 would be considered above average, and anything below 68 is below average. A score of 80.3 would place a product in the top 10% and is the point at which it becomes more likely that a user will recommend the website to a friend. For this reason, 80.3 is the goal of a strong website. (Sauro 2011a)

119. The chart below provides the recommended way to interpret SUS scores.

MEANING OF SUS SCORES/RELATED ADJECTIVES (Lewis and Sauro 2018)

Grade	SUS Score	Percentile Range	Adjective
A+	84.1–100	96–100	Best Imaginable
A	80.8–84.0	90–95	
A-	78.9–80.7	85–89	Excellent
B+	77.2–78.8	80–84	
B	74.1–77.1	70–79	Good
B-	72.6–74.0	65–69	
C+	71.1–72.5	60–64	
C	65.0–71.0	41–59	Average



C-	62.7–64.9	35–40	
D	51.7–62.6	15–34	Poor
F	0–51.6	0–14	Worst Imaginable

120. The results of the SUS questions for Match.com was **81.6**. This is an **A rating**, and very strong. It puts Match.com's signup and cancelation flow among the top 10% of all websites in terms of usability.

**Average SUS Score Across All Participants:**

Lower Limit	Average SUS Score*	Upper Limit
A- (79.0)	A (81.6)	A+ (84.2)

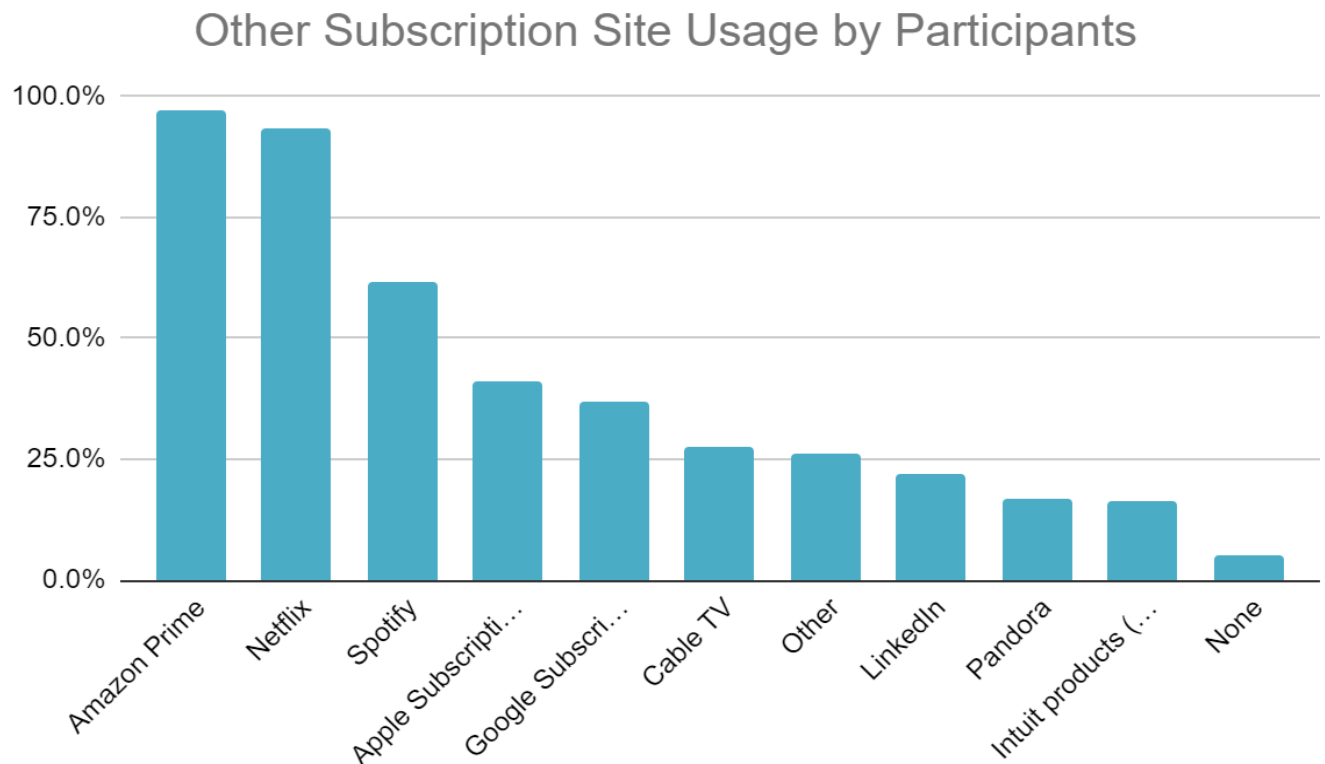
D. Qualitative Questions

121. In addition to the objective criteria, I also asked several qualitative questions so I could determine user perception of the simplicity/difficulty of cancelation. This section is split into three categories: Introductory Questions, Task Questions, and Closing Questions.

E. Introductory Questions

122. **Intro Question 1:** Have you previously signed up for a paid subscription online? If so, please indicate which online subscription you have signed up for below. If the service is not listed, select "Other." If you have *not* signed up for a subscription online before, select "None."

web-based subscription service, with Amazon Prime and Netflix being the most common.



Other subscription sites or types of online subscriptions mentioned include:

- Tinder
- Food plans
- Audible
- YouTube TV/YouTube Premium
- Clothing
- Hulu
- Disney+
- HBO Max
- Costco
- Fitness
- Charities
- Crunchyroll

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- Sports Channels
- Patreon
- Peacock
- Other dating sites
- Adobe
- Shudder
- SlingTV
- Paramount+
- Gaming subscriptions

## F. Task Questions

### Subscription Comparison

124. After the participant completed signing up for Match.com, we asked them to compare the Match.com subscription experience to their other subscription experiences. Here is the question:

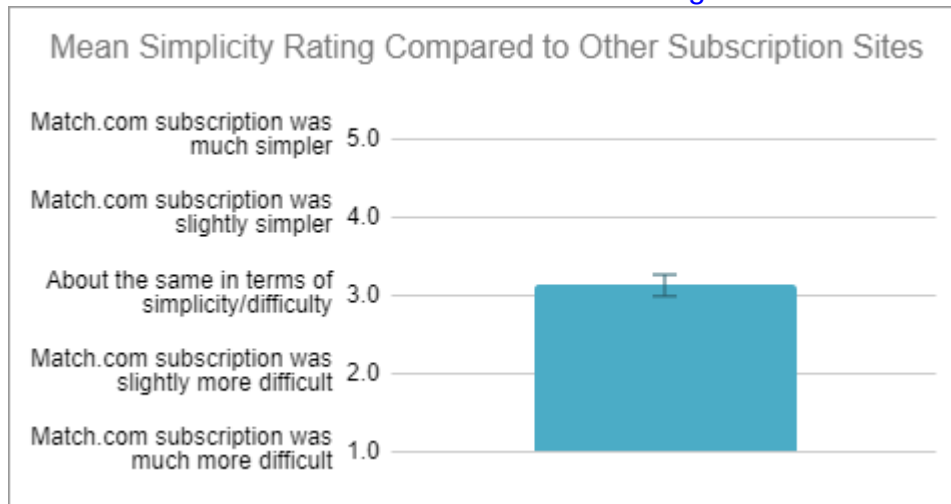
125. **Task Question 1:** How did your experience subscribing to Match.com compare to your subscription experience for *other* online products or services you have subscribed to?

1. Match.com subscription was much more difficult
2. Match.com subscription was slightly more difficult
3. About the same in terms of simplicity/difficulty
4. Match.com subscription was slightly simpler
5. Match.com subscription was much simpler

126. As the figure below shows, participants reported that signing up for Match.com was about the same in terms of simplicity as signing up for other subscription services. With a margin of error of .14 at 95% confidence, we can be quite confident that users feel that the Match.com subscription process is about as simple as any of the other subscription sites with which they are familiar.

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127. This next section covers the **Single Ease Question** (SEQ) asked for each of the two tasks (sign up and cancelation). This is a standard question to ask after a task during a usability study to gauge the participant's perception of the ease/difficulty of that task. The participant provides an answer on a 5-point scale ranging in difficulty/simplicity. These data can then be analyzed statistically for comparison or benchmarking purposes.

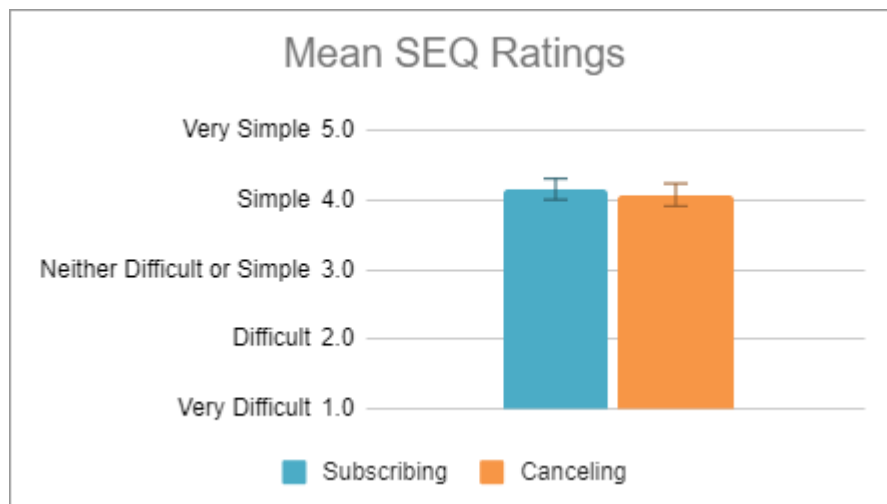
1. How would you best describe the  
**subscription** process on Match.com?

1. Very Difficult
2. Difficult
3. Neither Difficult or Simple
4. Simple
5. Very Simple

2. How would you best describe the  
**cancellation** process on Match.com?

1. Very Difficult
2. Difficult
3. Neither Difficult or Simple
4. Simple
5. Very Simple

128. As the results below show, both subscribing and canceling were rated to be at about a 4, which is “simple” in this case. The difference between the two scores was found to be from 0 to 0.26 at 95% confidence and, therefore, not statistically significantly different ( $p=.392$ ).



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129. In total, 88.3% of participants rated the cancelation process as very simple, simple, or neutral in terms of simplicity.

#### G. Closing Questions

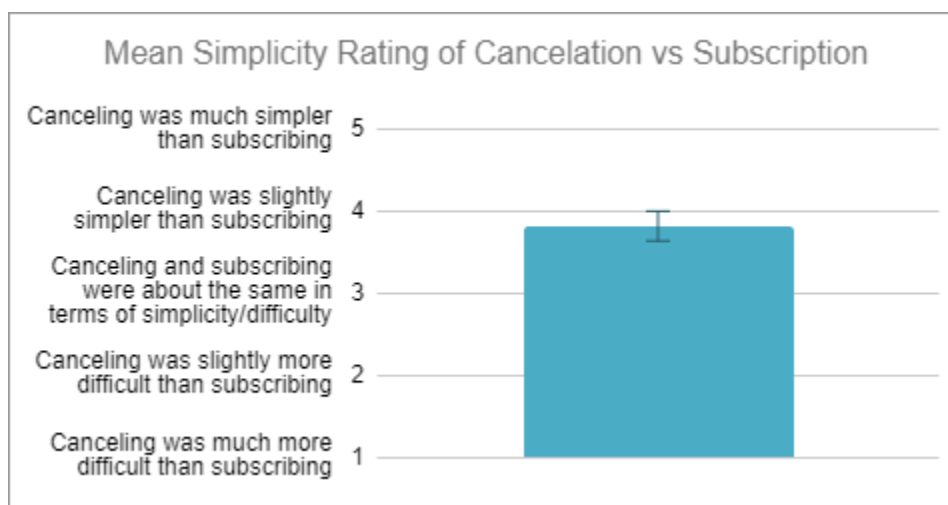
#### Subscription vs Cancelation Comparison

130. We then asked participants to compare their experience signing up to their experience canceling.

131. **Closing Question 1:** How did your experience **subscribing** to Match.com compare to your experience **canceling** your Match.com subscription?

1. Canceling was much more difficult than subscribing
2. Canceling was slightly more difficult than subscribing
3. Canceling and subscribing were about the same in terms of simplicity/difficulty
4. Canceling was slightly simpler than subscribing
5. Canceling was much simpler than subscribing

132. Overall, as the results below show, participants rated the cancelation process as slightly simpler than the subscription process. Although both were rated as simple, the participants reported cancelation was slightly simpler still. Moreover, 84.7% of responses were a 3 or higher. Meaning nearly 85% of participants rated the cancelation process as simple as, or simpler than, the subscription process.



## VIII. ANALYSIS OF MATCH.COM SUBSCRIBER DATA

133. I also analyzed Match.com's actual subscriber data to determine whether Match.com had data to show whether subscribers could easily cancel on its website. My analysis of this data confirms Match.com's online cancellation flow is simple. The data is also consistent with the results from my usability study described above.

### Cancellation Success Rate

134. I calculated the percentage of subscribers that successfully cancel through the online cancellation flow or accept a save offer, out of the total number of subscribers that enter the flow (defined as clicking the "Cancel Subscription" button that leads to the first survey page).<sup>9</sup> Using that approach, from January 2013 through December 2022, over 95% of subscribers who entered the flow either canceled

<sup>9</sup> I consider this the appropriate page at which to treat a subscriber as entering the cancellation flow because the subscriber could have visited all previous pages for non-cancellation reasons. For example, the subscriber could have visited the Account Settings page to change their account password or manage email notifications. Or the subscriber could have visited the "Manage subscription" page to view subscription status.

through the flow or accepted a save offer before their next renewal.<sup>10</sup> In my experience and expert opinion, that high of a “success rate” indicates a simple and easy-to-use process.

135. My analysis is conservative because the subscribers who entered the flow but did not ultimately cancel do not necessarily represent “failed” cancelation attempts. There could be many reasons a subscriber who entered the flow did not complete the cancelation. For example, a subscriber may have entered the cancelation flow with no intent to cancel but hoping to trigger a “save offer” to obtain a discounted renewal. If the subscriber was never presented with and therefore never accepted a save offer, that subscriber would be counted as a “failed” cancelation in the analysis above, even though the subscriber never intended to cancel. Alternatively, a subscriber may have entered the flow with the intent to cancel but changed their mind for a variety of reasons. Perhaps the subscriber reviewed the list of benefits he or she would lose by canceling (presented on the second survey page) and decided not to cancel. Or the subscriber was merely browsing the site to see what the cancelation process entails if and when the subscriber might want to cancel at some point in the future, with no present intent to cancel. Or a subscriber intended to cancel but was interrupted by some other event entirely unrelated to the cancelation flow (someone at the door, a telephone call, etc.). But because those subscribers did not cancel, they would all be treated as “failed” cancelations in the analysis above, thereby artificially decreasing the “success rate.” Thus, it is likely that the number of subscribers (if any) that were truly “unable” to cancel is far less than the 5% suggested by the analysis above, further bolstering my opinion that the high success rate suggests a simple and easy-to-use process.

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<sup>10</sup> MATCHFTC846468. This number is calculated by dividing the sum of Columns E (reflecting the number of subscribers who canceled through the flow before their next renewal) and G (reflecting the number of subscribers who accepted a save offer), by the sum of Column C (reflecting the number of subscribers entering the flow). The result is .9546, or 95.46%, meaning over 95% of subscribers that enter the flow successfully cancel through the flow or accept a save offer prior to their next renewal.



**Average Time to Cancel**

136. In addition to the above, I also analyzed the median time it takes actual subscribers to complete the online cancelation flow. From January 2013 through October 2022, the median time from clicking “Cancel Subscription” to completing the cancelation was approximately 44 seconds, with a range of 36 seconds to 76 seconds.<sup>11</sup> In my experience and expert opinion, a cancelation process that has an average median time to complete of only 44 seconds is simple and easy to use. That number indicates subscribers can quickly and efficiently move through the pages.<sup>12</sup>

137. As in the usability study, I also compared the median time to cancel to the median time to successfully complete the subscription purchase process (excluding the time it takes to register for an account, which is a necessary step before purchasing a subscription). Although it would be reasonable to include both registration and subscription in the comparison to the cancelation flow—which is what I did in my usability study described above—because both are necessary steps before a consumer can actually purchase a subscription, I understand that Match.com does not track the amount of time that it takes a user to complete the registration process, so that data is unavailable. As a result, I took a conservative approach here and compared only the payment process completion time to the cancelation flow completion time. As indicated by the length of time it took participants in the usability study to sign up for a Match.com subscription (including both registration and subscription), the registration process is relatively lengthy as compared to the subscription payment process. A video of the entire registration and subscription process is available at Appendix K.

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<sup>11</sup> MATCHFTC777081. This number is the average of the monthly median time to cancel values in Column C.

<sup>12</sup> The average median time from the password entry page to cancelation confirmation (represented in Column D of the same spreadsheet) is approximately 94 seconds, which is understandable given the time it takes to enter a password and potentially complete a reCAPTCHA, if presented with one. Inclusion of those pages in the median time to cancel does not change my opinion.

138. From January 2013 through August 2022, the average median time from the first payment page click in a session to a successful subscription purchase was approximately 175 seconds—over four times longer than the average median time to cancel.<sup>13</sup> This indicates to me the cancelation process is at least as simple as—and likely simpler than—the purchase process.

DATED: January 13, 2023

A handwritten signature in black ink, appearing to read 'Brandon E.B. Ward', with a stylized, cursive script.

Brandon E.B. Ward

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<sup>13</sup> MATCHFTC774721. This number is the average of the monthly median time to successful purchase in Column C.

# EXHIBIT 3

## **Rebuttal Report of Dr. Jennifer King**

**FTC vs. Match Group, Inc. and Match Group, LLC.**

**May 15, 2023**

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## Introduction

I previously submitted an expert report in the matter of *FTC vs. Match Group, Inc. and Match Group, LLC* on January 13, 2023. I was asked to respond to Brandon Ward's report, also submitted in this matter on January 13, 2023. In this rebuttal, I respond to several limitations and inaccuracies in the Ward report.

### *Key Findings:*

- Ward's heuristic analysis is merely a statement of his unsupported opinions. Ward misapplies the method and does not support his analysis with research.
- Ward argues that usability professionals do not use "simple" as a standard, when the evidence shows this is not the case.
- Ward's report contains multiple errors and omissions: a failure to justify his analysis of the password barrier; he does not consider older versions of the cancellation flow in his analysis, thus ignoring multiple issues not present in the existing flow; he uses irrelevant sources as a basis for comparison with the Match.com cancellation flow; and he makes unsupported claims about industry practices to justify his findings.
- Ward's study design is inherently flawed and suffers from multiple forms of bias as well as construct validity concerns and demand effects. He manipulates the presentation of his findings to exaggerate the effects. His sampling frame for his user study is biased and not representative of Match.com users as it excludes users in the "universe" of Match.com's customers, particularly older users, and excludes participants who failed the first step of the study. As such, this study cannot be used to make generalizations about Match.com customers' interactions with the cancellation flow.

- Ward misuses the System Usability Scale in his study, which in itself is a flawed instrument of measurement and not determinative of good usability.

But importantly, Ward's report neglected to examine customer comments to the company or prior versions of customer cancellation flows in his analysis. The customer comments are pertinent in that they provide insight from actual users of Match.com about the central issue of whether Match.com's online cancellation flow is simple. For example, as one customer complained to the FTC about Match.com's online cancellation process, "The process should be easy to find (it's not), clearly explained (step 1 of 2 for example), and if you aren't truly canceled unless you receive an email, this should be clearly stated so the customer knows to look for that."<sup>1</sup>

In response to Ward's flawed user study, in this report I introduce findings from an analysis of customer service comments submitted to and provided by Match.com, as well as complaints drawn from the FTC's Sentinel database regarding Match's cancellation practices. As I will discuss in more detail in Section 5, reviewing actual customer feedback about their first-hand experience with the cancellation process provides an *in situ* perspective that Ward's study cannot provide.

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<sup>1</sup>Match\_CSN 2008-2022\_Cleaned.xlsx, Entry 1047 (Originator Reference Number: 8750091368985)

## Section 1: Application of Heuristics

### *A. Unsupported Heuristic Analysis*

Ward claims in his report to have conducted a heuristic analysis, relying as I did in my report on the work of Dr. Jakob Nielsen, specifically Nielsen's Ten Usability Heuristics.<sup>2</sup> However, Ward misapplies the method, which is designed to help identify usability problems, not as a test that a site can pass or fail. In his report, Ward provides a perfunctory overview of the heuristics and does not engage in any detailed analysis of how the heuristics apply to specific aspects of the cancellation flow. Furthermore, he fails to cite supporting evidence or research to back up his claims, beyond his flawed and invalid survey, which I will discuss later in Section 3. As a reader, we are simply expected to accept his opinion at face value, presumably based on his experience.

As noted, the purpose of a heuristic evaluation is to identify functionality problems within an interface and evaluate these issues according to verified usability principles. Ward's personal opinions do not satisfy the conditions of a heuristic evaluation. According to usability pioneer Dr. Jakob Nielsen:

“The output from using the heuristic evaluation method is a list of usability problems in the interface with references to those usability principles that were violated by the design in each case in the opinion of the evaluator. It is not sufficient for evaluators to simply say that they do not like something; they should explain why they do not like it with reference to the heuristics or to other usability results.”<sup>3</sup>

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<sup>2</sup> Jakob Nielsen, *10 Usability Heuristics for User Interface Design*, Nielsen Norman Group (updated Nov. 15, 2020), <https://www.nngroup.com/articles/ten-usability-heuristics>.

<sup>3</sup> Jakob Nielsen, *How to Conduct a Heuristic Evaluation*, Nielsen Norman Group (November 1, 1994), <https://www.nngroup.com/articles/how-to-conduct-a-heuristic-evaluation>.



In other words, a good heuristic analysis almost *always* identifies usability problems for improvement. Ward makes the same misapplication of method in paragraph 90, where he introduces Nielsen's five quality components (learnability, efficiency, memorability, errors, and satisfaction<sup>4</sup>) when discussing the design of the cancelation flow but again offers only his own opinion as a basis for establishing whether or not the cancelation flow meets these criteria.

For example, in reviewing Heuristic Eight (paragraphs 82-84), Ward makes statements such as "I did not identify any irrelevant or unnecessary information. Each piece of information provided to the subscriber was clear, relatively concise, and easy to understand" without providing any detailed analysis or supporting research to bolster this finding. Furthermore, this finding is directly contradicted by the placement of the survey across multiple steps of the cancellation flow, which was anything but concise or necessary. It is also contradicted by the company documents I review in Section 5.A of my expert report, where both company employees and Match.com customers (by way of company documents) agree that the flow was long, complex, and included unnecessary steps.

Ward does not provide a grounded or systematic rationale for how he conducted his heuristic evaluation. Instead, he uses his own personal experience as the primary basis for assessing the usability of the cancellation flow (see paragraph 19). In doing so, he violates one of the cardinal rules of user experience design: "you are not the user."<sup>5</sup> In one especially egregious example, in paragraph 94, Ward cites his own firsthand experience as proof that the cancellation flow "satisfies" Nielsen's memorability component. To be reliable evidence, a heuristic evaluation must be grounded in both expertise of the fundamental research that underlies the heuristics and

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<sup>4</sup> <https://www.nngroup.com/articles/usability-101-introduction-to-usability>.

<sup>5</sup> <https://www.nngroup.com/articles/false-consensus>.

be bolstered by supporting research. Without this, a heuristic analysis is nothing more than a set of unsupported opinions.

### *B. “Simple” as a Standard*

Furthermore, Ward argues that usability professionals “generally do not use the standard of “simple.”” (P11). Frankly, this argument is baseless and directly contradicted by multiple published authors in the field who discuss usability in terms of simplicity.<sup>6</sup> Dr. Jakob Nielsen himself, as well as his colleagues, have produced multiple videos discussing simplicity in design.<sup>7</sup> In them, Budiu and Nielsen note that simplicity in design is a relative concept that must account for the channel of communication (for example, simple design for mobile phones is not the same as simple design for desktop computers). Furthermore, they state that a simple design is a useful design that combines both usability and utility. Extra features detract from usability, as “each additional element in a UI is one more thing for users to ponder when they want to do something.”

In my heuristic analysis, I concluded that Match.com’s cancellation service is *not* simple, contrary to Ward’s claims, based in part on Buidu and Nielsen’s research and other foundational texts. Ward’s conclusion is contradicted by the fact that the cancellation flow is overloaded with excessive steps that make the experience of cancellation unnecessarily complex. As my review of Match.com customer comments will demonstrate in Section 5, Match.com’s customers likewise found the cancellation flow confusing, complicated, and not simple.

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<sup>6</sup> See generally: Steve Krug, *Don’t Make Me Think, Revisited: A Common Approach to Web Usability*. New Riders, 2013; Jakob Nielsen and Hoa Loranger, *Prioritizing Web Usability*. Pearson, 2006; Donald A. Norman, *The Design of Everyday Things*. New York: Basic Books, 2013.

<sup>7</sup> <https://www.nngroup.com/videos/keep-it-simple-ux-slogan-2/>; <https://www.nngroup.com/videos/simple-design-relative/>.

## Section 2: Report Errors and Omissions

Ward's report also contains a number of errors and omissions, which I will discuss in detail below.

### *A. Password Conditions*

Ward does not justify the placement of the password screen in the cancellation flow. He states, "Once a subscriber clicks on "Manage subscription", they are prompted: "To continue, please supply your password." **It is clear that if the subscriber wants to continue to cancel, they must enter their password** and complete the reCAPTCHA (to prove the subscriber is not a robot)" (Paragraph 15, emphasis added). He follows that, "It is reasonable for Match.com to protect unauthorized or compromised system access to a user's billing and account information." However, the customer options available in the cancellation flow do not sufficiently justify the placement of the password screen.

First, as I discuss in my expert report (p.53 & 55), the options behind the password screen (Subscription Status and Cancel Subscription) pose little actual security risk for the user. It is unclear what, exactly, is being protected here from the customer perspective. Next, given that Match has complete control over the information architecture of their website, it was its choice regarding what portions of the site it placed behind additional password authentication. For example, if Match.com was truly concerned about unauthorized access to user account options, then the entire set of account options could be password gated, as well as other far more sensitive account features, such as sending messages. Computer security experts remind us that any burden

imposed by such mechanisms should be *minimal* and *reasonable*.<sup>8</sup> These choices are less than reasonable from a customer's perspective.

In several customer complaints cited in the documents I reviewed in my report, customers reported an inability to cancel due to Match.com's lack of assistance in resetting lost passwords. One complainant reported they "tried their "Forgot Password" request, but NEVER got the email. They [Match.com] took my money!!"<sup>9</sup> Another customer says, "I requested the link to cancel my account months ago. I noticed today that I was charged 80.00. I never received the email link. The company is not sending the email link to reset passwords. As a result i have been unable to cancel my membership."<sup>10</sup> Given these customer concerns, Ward's lack of engagement with password reset features in his usability study is a significant oversight.

### *B. Does Not Consider Older Versions of the Cancellation Flow*

Ward's report only applies to the most recent version of the site and fails to review past versions of Match.com's service at issue in the FTC's complaint. Specifically, his heuristic analysis focuses only on the 2022 version of Match.com's online cancellation flow, and therefore fails to identify or consider flaws I discovered in the 2016 and 2019 versions I reviewed. For a detailed review of the flaws in these versions, I refer the reader to Sections 4.B.I-III of my expert report. Paragraph 103 of Ward's report notes that while he observed versions going back to 2014, he did not review them. The lack of historical review obviously limits his analysis to the current day and does not address the range of concerns outlined in the complaint. This is similarly a flaw

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<sup>8</sup> Matt Bishop, *Computer Security: Art and Science*. Chapter 13: Design Principles, Page 348. Boston, MA: Addison-Wesley, 2003.

<sup>9</sup> Match\_CSN 2008-2022\_Cleaned.xlsx, Entry 234 (Originator Reference Number: 8750091503732)

<sup>10</sup> Match\_CSN 2008-2022\_Cleaned.xlsx, Entry 119 (Originator Reference Number: 8750091572538)

with his study: it too only addresses the site as it exists today. As such, Ward failed to analyze the versions of Match.com's online cancellation flow that were in place for most of the time period at issue in the FTC's complaint.

### *C. Uses Irrelevant Sources for Comparison*

Ward spends considerable effort in his report attempting to compare Match.com's cancellation process with those of other online paid subscription services. As usability engineer John Brookes states: "Comparing usability of different systems intended for different purposes is a clear case of 'comparing apples and oranges' and should be avoided wherever possible. It is also difficult and potentially misleading to generalize design features and experience across systems."<sup>11</sup> Inexplicably, Ward fails to compare Match.com's cancellation process to those of other *online dating services*, with the exception of eHarmony. Given that online dating sites are a standalone consumer category that can allow for multiple comparisons, it is unclear why Ward refused to compare Match's cancellation processes to those of other subscription-based dating companies, as I did in my report, given that comparing one's site directly to one's competitor site is a standard practice: competitive usability testing.<sup>12</sup>

One obvious reason for Ward's decision may be that when comparing Match.com's cancellation process to those of other online dating services, it becomes apparent that Match.com's long, confusing, multi-step cancellation flow is not the industry norm, nor is the placement of the cancellation survey in the middle of the cancellation process. As discussed in Section 5.B of my report, "Competitor Practices," I reviewed two competitors (Coffee Meets Bagel and Facebook

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<sup>11</sup> Brooke, John. (1995). SUS: A quick and dirty usability scale. Usability Eval. Ind.. 189. Pg. 2.

<sup>12</sup> See generally: <https://www.nngroup.com/articles/redesign-competitive-testing/>;  
<https://www.nngroup.com/articles/competitive-usability-evaluations/>.

Dating). Even in instances where a non-optional survey was included (Coffee Meets Bagel), the cancellation process was still shorter than Match's. In Ward's eHarmony example (Page 185), the user survey shown in his screenshots consists of a single question ("Did you find a partner on eHarmony?") with a yes/no answer response, a substantive difference from the multi-part survey included in Match.com's flow. Moreover, Ward presents several examples in which customer surveys appear *after* customer cancels, including Amazon Prime (Page 152-3), Disney+ (Page 178), Netflix (Page 213-4), and Spotify (Page 234-5). In these examples, the service communicates: (a) the user has effectively canceled their subscription; (b) the service has sent an email confirmation; and/or (c) an end date of service. Only *after* this communication does the service present a survey; surveys are typically optional and framed in the past tense (e.g., "Please tell us why you canceled. By the way, this is optional.") Evidently, compared to online dating services and *non*-online dating services, Match.com's survey requirements are arduous and incommensurate with industry standards. As I note above, it is important to compare apples to apples as opposed to apples and oranges; this kind of accountability matters for creating consistent and accurate thresholds of comparison regarding what users consider to be difficult and not. This problem also appears in his survey questions, where Ward provides no direction or means of comparison for users, nor does he ask users to specify what products or processes they are comparing to the Match.com cancellation process.

#### *D. Did not consider customers' own complaints about cancellation*

In addition to the flaws discussed above, Ward's report did not engage with customer comments and complaints from individuals who reported problems with Match.com's cancellation process. Ward also did not acknowledge documents produced by the company where Match.com's

own employees documented usability issues and customer confusion with the cancellation flow. I will provide my own review of customer comments in Section 5 of this rebuttal report.

*E. Makes unsupported claims about industry practices*

Ward makes several wholly unsupported claims about industry practices throughout his report that do not withstand scrutiny. At paragraphs 21 and 106, he provides an 80% figure as a threshold by which “[a]ny score above 80% in a study like this would demonstrate usability and simplicity,” but provides no source or explanation for this arbitrary metric. In paragraph 41 he argues that “[p]resenting the survey after confirming the cancellation would likely decrease response rates” without providing a basis for this assertion. Nor does he acknowledge that even in the examples he provides, the majority of those cancellation flows the surveys are limited to a single question, not a multipage series of questions. In paragraph 77, he argues that Match’s multistep process to cancel is simple and clear, suggesting that a direct, one-step process would be too error prone or “difficult to reverse.” This claim assumes that it would somehow be outside the company’s control to permit customers to reverse these decisions. This is nonsensical: every aspect of the design of the site is under the company’s control, and certainly other companies have created one-step cancellation processes that are not subject to excessive errors. At minimum, as Nielsen advises in his usability heuristics, asking users to confirm whether they wished to cancel should be sufficient.<sup>13</sup>

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<sup>13</sup> Jakob Nielsen. <https://www.nngroup.com/articles/confirmation-dialog/>

## Section 3: Flawed and Unreliable Study Design

Ward's user study, which he uses as the primary source of support for his heuristic analysis, is flawed and unreliable and cannot be used to support any generalizations of user behavior on the site. There are several flaws in the design and implementation of this study that contribute to this finding:

### *A. Sampling Frame*

Ward used UserTesting.com to conduct his user testing, selecting from the platform's roster of testers. UserTesting.com is a usability testing platform which recruits test subjects to participate in repeated tests for payment. While the use of such participants for many forms of testing is not immediately disqualifying, it must be understood that these test subjects in many instances are quasi-professional test subjects who complete multiple forms of usability tests, including on other platforms, for payment on a regular basis.<sup>14</sup> Generally, they are not naive testing subjects. Furthermore, despite Ward's statement that the sampling "universe" for his study "includes all potential Match.com users in the U.S. between 2014-present," not only is there no way to guarantee these people are in the sampling frame, UserTesting.com subjects are not necessarily representative of either Match.com's customers generally nor the specific customers who may have struggled with the Match.com cancellation process. These factors make the external validity of this test highly suspect.<sup>15</sup>

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<sup>14</sup> Multiple online sources are devoted to helping people make money doing gig work on testing platforms such as UserTesting; see generally: <https://www.reddit.com/r/useresting/>; this article provides detailed instructions regarding how to pass UserTesting's screening process in order to become a tester: <https://thesmartwallet.com/useresting-review-how-much-money-can-you-really-make/?articleid=44617>; this YouTube video notes that: "Many want to know if the site is legit and if you can do it full time." <https://www.youtube.com/watch?v=XxoWuHv-6Wo>.

<sup>15</sup> <https://www.nngroup.com/articles/quant-vs-qual>.



### *B. Sample population demographics and ability*

Ward's study consisted primarily of younger users (mean = 36.5 years) who provided self-ratings of their online experience. Only one of the 164 participants rated themselves as a 'beginner' internet user (41% rated themselves as "average" and 58% as "advanced"). He also cut off the top age of his subject pool at age 70 without providing any justification as to why, despite the fact that customers aged 70 and older are most certainly in the "universe" of Match.com users. In short, Ward's study consisted of a group of highly experienced, non-novice, younger internet users who as a matter of course would be highly adept at navigating most online tasks. To call this population "novices," as he does in paragraph 81, is extremely misleading. I find the bias towards younger users particularly concerning, as I predict that the Match.com users who likely had the most trouble with the cancellation flow would skew older (age 50+) and have less online experience, especially as compared to digital natives (i.e. Millennials, those aged approximately 43 years and under<sup>16</sup>), a point I will discuss in more depth in Section 5 when I review customer comments to the company. Ward also argues that the demographic characteristics of the test subjects matches Match.com's user base, though information about Match.com's user demographics is not provided in the report and the time period is not specified. While the documents I reviewed in this litigation did not include a detailed breakdown of the Match.com user demographics over the time period of the complaint, the Match.com site itself is a legacy product, founded in 1993,<sup>17</sup> and likely one with substantial name/brand recognition among older adults. According to Match's own company profile, over 37% of current users are aged 50+,<sup>18</sup> and the "50+ age group is Match.com's fastest

<sup>16</sup> <https://www.nngroup.com/articles/millennials-digital-natives/>;  
[https://eprints.lse.ac.uk/27739/1/Digital\\_natives\\_%28LSERO%29.pdf](https://eprints.lse.ac.uk/27739/1/Digital_natives_%28LSERO%29.pdf).

<sup>17</sup> <https://en.wikipedia.org/wiki/Match.com>.

<sup>18</sup> <https://match.mediaroom.com/key-facts> (visited April 2023).

growing demographic.”<sup>19</sup> A recent study by the Pew Research Center also confirms these statistics; as of March 2023, Match.com was the second most popular dating platform among those surveyed. Of those respondents who reported using Match, 54% were aged 50-64, and 44% over the age of 65, the oldest users of any of the dating sites noted in the report.<sup>20</sup> Whereas Tinder is the most widely used dating platform in the U.S., “[b]y contrast, users 50 and older are about five times more likely to use Match than Tinder (50% vs. 11%).”<sup>21</sup> Ward’s testing sample only contains sixteen test subjects aged 45 or older of 164 total (9.75%). Furthermore, he does not report any demographic data regarding the 69 participants he screened out of the study because they could not complete the sign-up task (paragraph 108); understanding the age breakdown of this group would be helpful for determining whether older users struggled with this process, and whether including this task biased the study against the inclusion of older users.

### *C. Scope of testing was biased and non-naturalistic*

An externally valid test of the cancellation flow would be as naturalistic as possible, involving recruiting a representative sample of customers and asking them to attempt to cancel their account in a way that replicated how they might use the site in their everyday lives. The testing task itself and instructions also must not influence the outcome of the study.<sup>22</sup> This practice is a basic component of both experimental design and usability testing: blinding users to the intent of a study avoids demand effects such as response bias, where respondents provide answers based on their expectations of the topic of the study.<sup>23</sup> The design of Ward’s study failed from the outset

<sup>19</sup> <https://match.mediaroom.com/index.php?s=30442> (visited April 2023).

<sup>20</sup> <https://www.pewresearch.org/short-reads/2023/02/02/key-findings-about-online-dating-in-the-u-s/>.

<sup>21</sup> *Ibid.*

<sup>22</sup> <https://www.nngroup.com/articles/quant-vs-qual>.

<sup>23</sup> Mummolo, Jonathan, and Erik Peterson. “Demand effects in survey experiments: An empirical assessment.” *American Political Science Review* 113.2 (2019): 517-529.

on multiple measures. First, it excluded any test subjects who were unable to complete the subscription task, meaning that test subjects again skewed towards experienced users that would be less likely to be confused by the Match.com cancellation flow.<sup>24</sup> Second, despite claiming that the test subjects would be blinded to the purpose of the study, in reviewing the testing instructions it is clear that not only were subjects informed from the start about the target of the study (Match.com), they were also informed of the purpose through the presentation of the two tasks (subscribe, then unsubscribe).<sup>25</sup> Third, subjects were instructed to “efficiently” subscribe as quickly as possible, skewing the results from the outset. This is priming, which can inappropriately influence participant response and bias the outcome.<sup>26</sup>

Usability tests can be constructed in multiple ways and used to measure many different aspects of a process. UX professionals, social psychologists, and economists caution that singular metrics (e.g., time, rankings) are susceptible to manipulation, becoming ineffectual measurements of human behavior.<sup>27</sup> However, if one is attempting to capture actual or realistic user behavior with a specific process, the goal of designing a usability test is to test user behavior in such a way that it is reflective of how a user actually uses the process in the course of their daily life.<sup>28</sup> Ward’s study does not do this, and thus cannot be used to generalize anything about how the Match.com cancellation process works beyond this narrow group of younger, experienced users who have been selected for their ability to complete tasks and follow specific instructions to do so “efficiently.” However, it is worth noting that despite being subject to demand effects (where the

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<sup>24</sup> But it is worth noting that this meant that 30% of his subject pool was actually unable to complete a basic subscription task and thus dropped from the study.

<sup>25</sup> See page 101 of Ward’s study, in which the instructions inform the user that the target is Match.com, as well as page 107, where the screen is entitled “Usability Study of Match.com.”

<sup>26</sup> <https://www.nngroup.com/articles/priming>.

<sup>27</sup> Laubheimer, P., & Moran, K. (2021, November 7). Campbell's law: The dark side of metric fixation. Nielsen Norman Group. Retrieved April 29, 2023, from <https://www.nngroup.com/articles/campbells-law/>.

<sup>28</sup> Moran, K. (2019, December 1). Usability Testing 101. Nielsen Norman Group. Retrieved April 30, 2023, from <https://www.nngroup.com/articles/usability-testing-101>.

test subjects know the purpose of the experiment and work to confirm the study hypothesis), 1 in 10 subjects still could not complete the cancellation process.

But ultimately, rather than observing natural user behavior with the cancellation process and noting any errors or confusion, Ward designed a “time on task” test, using speed as a proxy for simplicity, calculated only to measure how quickly users made it through the process with no measurement of errors.<sup>29</sup> Furthermore, he corrupted this design by instructing his subjects to create an account as “efficiently” as possible, biasing their behavior and rendering the basis for the timing calculations meaningless. Ultimately, the rate at which users complete a process cannot stand alone as a measurement of simplicity, and even more so, speed tests of experienced internet users.

#### *D. Misleading statistics*

In several cases, Ward presents his findings in a misleading manner to inflate his findings. For example, in paragraph 129, he reports the mean responses to this question rather than the actual percentages in order to include neutral ratings in his summary statistics to make them appear higher than they actually were. In actuality, approximately 65% of his experienced participants rated cancellation as simple or very simple, rather than the 88.3% he claims when including the neutral responses. Neutral responses are just that—neutral, not statements of agreement. Similarly, in paragraph 126, regarding the question of how test subjects compared subscribing to Match.com compared to other online products, Ward reports the mean responses, claiming that “84.7% of responses were a 3 or higher, Meaning that nearly 85% of participants rated the cancellation process as simple as, or simpler than, the subscription process.” Again, this is misleading. Percentage breakdowns of this question demonstrate that 50% of the respondents found them

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<sup>29</sup> <https://www.nngroup.com/articles/quant-vs-qual>.

“about the same,” while 21.5% found that subscribing was much more or slightly more difficult, and 27.6% found it much or slightly more simpler, a difference of only 6% between these groups.<sup>30</sup> Again, in paragraph 132, when examining responses to the question of “How did your experience **subscribing** to Match.com compare to your experience **canceling** your Match.com subscription?”, Ward reports the mean responses to this question rather than the actual percentages to inflate his numbers. After subtracting out the 20% who rated the experiences about the same, 15.3% rated the experience of subscribing as slightly or much more difficult than canceling, and only 65% rated it slightly or much simpler than canceling. This is not the same as Ward’s misleading characterization that “nearly 85% of participants rated the cancellation process as simple as, or simpler than, the subscription process.”

#### *E. Questionable methods*

While the entire design of this study suggests that Ward has little to no experience with formal experimental design, there are some specific areas of concern to highlight. In paragraph 106, as mentioned earlier in this report, he provides an 80% threshold for completion as a success metric without providing a basis for this number. He also arbitrarily designates “a couple of minutes” as a measurement for “simplicity” (paragraph 106). Again, because time metrics can be manipulated, a more reliable way of measuring usability in this study would have been to record potential errors participants made as they attempted to cancel. In paragraph 107, he mentions a “standard” scale of simplicity and difficulty again without providing any basis for where he derives this standard scale. Is it validated? Has it been used by other researchers? The study leaves these important details ambiguous.

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<sup>30</sup> As a reminder, the participants who actually found this task impossible were dropped from the study.

In paragraph 111, he declares that his study shows that the Match.com cancellation process was simple because it took less time for the participants on average to cancel than to sign up. However, this conclusion raises many questions. First, concerning construct validity: is this study actually measuring what it purports to measure? Given the number of errors and biases in the study design, I suggest it is providing a biased assessment of two very specific tasks by an experienced, non-representative pool of test subjects, not a valid or reliable measurement of the ease, or lack thereof, of what a representative sample of Match.com customers may encounter with the cancellation process. A study design that actually attempted to answer this question would have, at minimum, observed test subjects navigating the cancellation process and observed success and error rates rather than focusing solely on time on task. Also, while Ward claims the process was “simpler than comparable subscription sites,” he never actually tests these processes or presents evidence to support this claim.

In paragraph 112, Ward applies the results from a meta analysis study in order to provide a general threshold to validate his task completion rate. However, the study (Sauro 2011b) is not a study of dating site cancellation task completion rates. Accordingly, this figure can be used only as a rough benchmark and nothing more given that it provides no detail about the complexity or length of tasks included. It is not the definitive benchmark that Ward claims it to be.

## Section 4: System Usability Scale (SUS) questionnaire

Ward’s use of the System Usability Scale (SUS) in his report merits a separate discussion to capture my concerns. In sum, Ward misuses the SUS in the survey portion of his study and thus his findings are neither a reliable measurement of his subject pool’s perceptions of the cancellation flow specifically nor generalizable per the criticisms I address above.

Usability engineer John Brooke, creator of the System Usability Scale (SUS), acknowledges that it provides “a simple, ten-item [Likert] scale giving a global view of subjective assessments of usability.”<sup>31</sup> Its template statements—“I think that I would like to use this system frequently;” “I found the system unnecessarily complex”—indicate an *entire system* with no specificity of individual features. It is a *subjective* assessment based on respondents’ experience with the system at the time of use. Respondents who have a positive experience with the system at the time of use are likely to increase the SUS score; on the other hand, respondents who have a negative experience with the system are likely to drive the score downward. The SUS was also not intended to diagnose usability problems.<sup>32</sup>

Ward states he was retained by Match.com to “evaluate and offer opinions about Match.com’s online subscription cancellation flow.” Additionally, his assignment was to “assess whether Match.com’s online subscription cancellation flow is, in fact, ‘not simple’”[4]. The content and implementation of the SUS is designed to assess the *overall usability of the Match.com website*, which was not the subject of Ward’s user testing. Under Ward’s instruction, participants (who had never used Match.com) subscribed to a Premium Three-Month subscription and then immediately canceled within the same session. This creates several problematic issues for bias, as test subjects might distinctly remember the sign-up flow, which in turn might make it easier for those users to know or intuit how to find the unsubscribe flow, as they now have at least basic familiarity with the Match.com website. Participants did not interact with other Match.com users, send messages, edit profiles, or explore additional features. However, Ward’s SUS questionnaire indicates statements such as: “I think I would like to use Match.com frequently”; “I found the

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<sup>31</sup> Brooke, John. (1995). SUS: A quick and dirty usability scale. Usability Eval. Ind.. 189. Pg. 3.

<sup>32</sup> Sauro, Jeff. 2011a. “Measuring Usability with the System Usability Scale (SUS) – MeasuringU.” January 2, 2011. <https://measuringu.com/sus/>.

Match.com website unnecessarily complex”; and, “I thought the Match.com website was easy to use.” These statements are beyond the scope of subscription and cancellation and indicate a much broader experience of the Match.com website than what Ward tested. Although Ward noted that he screened out participants who had ever been Match.com *subscribers*, it is unclear if this included anyone who had ever used the Match.com *website*. If Ward had attempted to use the SUS properly, a far better design would have been to tailor the SUS questions to each task and then ask the questions after Task 1 (subscribe) and Task 2 (cancel) in order to isolate the tasks and have an actual basis for comparison. Finally, Ward also notes in paragraph 115 that he used “part” of the SUS battery of ten questions; however, it is unclear what he means by this given that it appears he administered all ten questions in the survey.

According to Ward, participant responses to the SUS questionnaire identified positive attitudes towards Match.com’s usability and ease. But before administering the questionnaire, Ward screened out 69 participants from the testing pool “because they were unable to sign up for a Match.com subscription” and these participants “were then excluded from the final study counts” (paragraph 108). His report’s findings reflect only the attitudes and metrics of study participants who subscribed *and* reached the cancellation phase. Participants who failed to subscribe did not take the SUS. This omission skews the SUS score (81.6) upward, as participants most likely to find the service “unnecessarily complex” and “cumbersome to use,” or “require a technical person” to use the service *did not get to respond*.

Studies suggest that the SUS questionnaire is not a reliable metric of usability or reflection of respondents’ attitudes. The alternation of positive and negative question items can cause users to misinterpret negatively worded questions, or forget to reverse their score such that they may be



“accidentally agreeing with a negative statement when they meant to disagree.”<sup>33</sup> Moreover, failure on the part of researchers to reverse scales for negative question items can cause miscoding and incorrect data reports.<sup>34,35</sup> As one critic states:

“The common issue here is that the SUS is mistaken as an objective measure of a system’s usability. This is not true. Again, it is a measure of the perceived usability of a system. While the difference between perceived (i.e., subjective) and actual (i.e., objective) usability may seem trivial to some, the difference is meaningful. The construct of perceived usability is flawed in itself. Despite our confidence, humans are actually quite inconsistent and prone to bias while rating their own usability experience after interacting with a system. For example, there is often a sizable discrepancy between how well someone thinks they did in a task and how well they actually did.”<sup>36</sup>

This discrepancy might have been clarified if Ward led an observational, “think aloud” study which both tracked subject errors as well as had participants elaborate on their thoughts and actions *during* the task, or through follow-up interviews with test participants—neither of which Ward completed.<sup>37</sup>

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<sup>33</sup> Jeff Sauro and James R. Lewis. 2011. *When designing usability questionnaires, does it hurt to be positive?* In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (CHI ’11). Association for Computing Machinery, New York, NY, USA, 2215–2224.

<sup>34</sup> Molich, R., Kirakowski, J., Sauro, J., & Tullis, T., (2009) Comparative Usability Task Measurement Workshop (CUE-8) at the UPA 2009 Conference in Portland, OR.

<sup>35</sup> Lewis, J. R., & Sauro, J. (2009). The factor structure of the System Usability Scale. In M. Kurosu (Ed.), *Human Centered Design, HCII 2009* (pp. 94–103). Berlin, Germany: Springer-Verlag.

<sup>36</sup> <https://research-collective.com/sus>.

<sup>37</sup> <https://www.nngroup.com/articles/thinking-aloud-the-1-usability-tool>.

## Section 5: Customer Comment Review

In order to respond directly to Ward’s user study, I requested and reviewed files of customer complaints provided by Match.com to the FTC (MATCHFTC773498; MATCHFTC776031; MATCHFTC772558; MATCHFTC776595; MATCHFTC776596), as well as complaints from the FTC’s Sentinel database (F01-MG-0028502). Comments, complaints, or questions from a company’s customers provides an organic source of information about their experience with a product or service.<sup>38</sup> They reveal a customer-centric perspective of a product or service’s primary challenges and problems. In this way, they are an excellent complement to a heuristic analysis as they provide “raw” feedback directly from customers that may both highlight issues identified by the heuristic analysis as well as raise other customer concerns. In contrast, Ward described his own subjective view of the cancellation process and those of the study participants. The best evidence to validate or rebut those opinions are the opinions of Match’s own customers.

Companies often have their own individual metrics for determining their thresholds of customer discontent such that a percentage of complaints they receive on a particular issue merit further attention. Match has not disclosed this threshold with respect to the difficulty of canceling services, though the documents I reviewed clearly demonstrate that the company tracked trends in customer feedback and satisfaction.

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<sup>38</sup> <https://www.fastcompany.com/90715907/the-importance-of-incorporating-customer-feedback>.

### *A. Match.com Files: Method*

Match provided multiple CSV files, at least one per year, from 2014-2018. These files appear to be archives of the company's customer service submissions for the Match.com product and all (except for 2018, which only includes a few month's data) contain thousands of submissions pre-classified by Match employees. Because it would be impossible (and unnecessary) to attempt to review all of these submissions, my first task was to zero in which submissions would be the most relevant to questions motivating this case.

First, I decided to focus exclusively on the files provided from 2016-2018 as none of the evidence I reviewed for my report predates 2016 (although the complaint includes prior years). Because I have no specific knowledge of the cancellation flow prior to 2016, it did not make sense to focus my efforts on reviewing older submissions. Next, upon examining the files, it was clear that Match employees had extensively classified customer submissions by topic (and subtopics), tracking them across product categories and years. For the purposes of understanding customer impressions of the cancellation flow, I examined several subcategories beneath the "Billing/Cancel" category. After examining multiple categories ("difficult cancel process"; "billing/cancel - misc"; "billed after cancel"; "unauthorized (unspecified)"; "auto renewal or refund policy"), I narrowed down the review to the "difficult cancel process" exclusively as it appeared to be most relevant to this case, and because the category contained a sufficient number of submissions to review.<sup>39</sup> Allowing for mistakes in classification by the company, it is my expectation that the subject matter of the majority of these submissions pertain to account

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<sup>39</sup> In 2016, the "difficult cancel process" category contained 1314 submissions; 2017, 938; 2018, 89 (this file only included submissions through March); Total: 2341. In 2016, the entire Billing/Cancel category contained 23,371 complaints; "difficult cancel process" was thus approximately 6% of this total.

cancellation issues, though comments about the cancellation process do also appear in other categories.

I extracted all submissions classified as “difficult cancel process” across all three years from the files, which once imported into a spreadsheet application contained 2,267 entries. The dates of the entries ranged from 01/01/16 to 03/01/18. I determined that the following fields were the most relevant by which to sort and select comments:

- Reference # (a twelve-digit unique number assigned to the comment)
- Date (consisting of chronological dates and times of comments between the customer service agent and the customer)
- Customer (the unique customer email address utilized to contact Match)
- Category (Match categorization of customer complaints)
- Free Form (the primary text record of the interaction between the customer service agent and the customer).

From the 2,267 entries, in 2016 there were 1,247 unique customer comments and 1,237 unique emails (Customer column), which I interpret as meaning that 1,237 customers generated 1,247 comments. In 2017 there were 931 customer comments and 918 unique email addresses, which I interpret as meaning that 918 customers generated 931 comments. And, in 2018 there were 89 Customer unique email addresses and 89 customer comments, which I interpret as meaning that every customer generated one comment. The comments primarily included email correspondence, but also included comments that appear to be generated via phone calls. Some entries in the open text field appear to be from agents themselves summarizing the issue on behalf of the customer, likely from a phone conversation.

Given the large number of submissions, I elected to analyze a smaller representative sample. Because this is a dataset consisting primarily of comments identified by Match employees as pertaining to the difficulty of the cancellation process, taking a representative sample of the dataset could potentially exclude some topics but overall generate sufficient coverage to identify the major themes raised by customers. I sampled a subset of the comments within the date ranges at a 95% confidence level with a confidence interval of +/-5%. This sampling method narrowed the total number of comments to review to 638. I applied a randomization function to randomly arrange their order within each year, and then selected the sample size required for each date range (Table 1).

**Table 1: Summary of Customer Comment Sampling**

				<b>Total</b>
<b>Dates</b>	2016	2017	2018	2016 - 03/01/18
<b>Total Comment Pool</b>	1247	931	89	2267
<b>Sample Size</b>	294	272	72	638 (28 % of total)

### *B. Coding Scheme*

In order to develop a coding scheme for the customer comments, I reviewed a subset of the entries to familiarize myself with their structure and content. Based on this review I developed an iterative coding scheme by which to categorize the types of comments, which I revised and added to as I reviewed the entire set of 638 entries. For each customer comment, I first determined whether the customer expressed confusion with the cancellation process, if the comment was in

regard to Match's cancellation policies, or if there was not enough information to classify it under the aforementioned categories.

I created thematic categories after viewing multiple customer comments on a similar topic both while I reviewed the comments and retrospectively after having reviewed all 638 complaints. Generally, after two to three instances of a topic occurred, I created a theme to help track them across comments.

- Confusion with the Cancellation Process: I marked a comment with *Cancellation Confusion* when the customer comment stated or made reference to having explicit issues, such as confusion or frustration, with the cancellation flow user interface.
- Cancellation Policy: I marked a comment with *Policy Concern* when the customer comment was focused on concerns with company policies regarding canceling a subscription.
- Other: I marked a comment as *Other* when the customer comment did not express confusion about cancellation or did not express a concern about cancellation policies.

After applying this primary classification, I then applied an additional classifier to further refine the categories:

- Unable to Cancel: I marked a comment with *Unable to Cancel* when the customer comment stated or made an explicit reference to being unable to cancel a subscription from Match.com.
- Believed Had Canceled: I marked a comment with *Believed Had Canceled* when the customer comment stated or made an explicit reference to having believed they canceled their subscription.

- Auto Renewal Issues: I marked a comment with *Auto Renewal Issues* when the customer comment stated or made an explicit reference to experiencing issues with the auto renewal process.
- Multiple Steps: I marked a comment with *Multiple Steps* when the customer comment stated or made an explicit reference to navigating various steps in the user interface.
- Delete Personal Data: I marked a comment with *Delete Personal Data* when the customer comment stated or made an explicit reference to wanting their personal data removed from the platform.
- Password Issues: I marked a comment with *Password Issues* when the customer comment stated or made an explicit reference to having issues with their password when attempting to cancel services with Match.
- Other: I marked a comment as *Other* when the customer comment did not state or did not make an explicit reference to one of the above-mentioned categories.

While I have classified these comments in order to better facilitate their analysis, to some extent the classification masks a layer of complexity that is difficult to simplify. A common pattern in many of the comments is that a customer experienced difficulty canceling their Match.com subscription, such as confusion from the multi-step cancellation process, the inability to access the cancellation flow, or even believing that they had followed the flow correctly only to be met with another membership charge afterwards. While the classification attempts to capture this complexity, there is some overlap between categories, which is why a simple tally of the categories doesn't fully capture the complexity of the corpus.

### *C. Comment Themes and Analysis*

The primary goal in conducting a qualitative analysis of these comments is to observe the themes that emerged regarding the cancellation process during the 2016 - 03/01/18 time period. Indeed, some of the comments were straightforward, with customers simply requesting a refund. However, many of the comments demonstrated a variety of themes which point to key usability problems with Match's cancellation process. Examples of each theme are included below. Comments are reproduced exactly as they appear in the file, including grammatical errors and misspellings, though in some cases I removed extraneous text for brevity. Each is uniquely identified using its respective reference number followed by the year posted. A listing of all comments reviewed is attached as Appendix A.

#### 1. Primary and Secondary Categories

The predominant issue that appeared in the comments I reviewed related to user confusion about cancellation; this constituted around 75% of the comments I reviewed. This was followed by comments expressing a specific concern or complaint about Match.com cancellation policies (14%), and comments unrelated to either of these primary issues (Other, 11%).

After applying a secondary category to these comments, the largest was "Unable to cancel," with 53% of the total, followed by "Believed had canceled," with 17% of the comment pool. Both of these issues speak to the heart of this case: users either finding it impossible to complete the cancellation flow, or thinking they had actually canceled, only to discover that they did not—a clear sign of the lack of clarity and simplicity with this cancellation flow. Another 6% specifically complained about the number of steps in the process. The other 24% of the pool was made up of



issues regarding passwords, requests to delete their profile or personal data, issues with auto-renewals, among others.

**Table 2: Comment Classification by Primary Category**

<b>Primary Category</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2016 - 03/01/18</b>
Cancellation Confusion	218	206	52	476
Policy Concern	37	37	16	90
Other	39	29	4	72
<b>TOTAL</b>	<b>294</b>	<b>272</b>	<b>72</b>	<b>638</b>

**Table 3: Classification of comments by secondary categories**

<b>Secondary Category</b>	<b>2016</b>	<b>2017</b>	<b>01/01/18 - 03/01/18</b>	<b>Total</b>
Unable to Cancel	154	141	41	336
Believed Had Canceled	51	49	8	108
Delete Personal Data	29	13	1	43
Multiple Steps	21	11	6	38
Auto Renewal Issues at Cancel	11	21	4	36
Password Issues	6	3	1	10
Other	22	34	11	67
<b>TOTAL</b>	<b>294</b>	<b>272</b>	<b>72</b>	<b>638</b>

## 2. Analysis of Comments

In this section, I review each subcategory classification and provide examples of relevant comments.

Unable to Cancel: The largest category of comments were by customers who were unable to cancel their Match.com subscription. These comments expressed confusion and frustration with the cancellation process; some were clearly contacts from customers seeking direct help from company agents to assist them with canceling as they were unable to do so themselves.

*“Very difficult to cancel service, it's almost hidden”* Ref.160122-001477, 2016

*“site hard to navigate and the could not turn off the auto renewal my self.”* Ref.160822-001151, 2016

*“make cancelation process easy because it is confusing and hard to get off the site.”* Ref.170107-000823, 2017

*“the situation that I'm going thru now is exceedingly maddening! I am simply trying to cancel a membership ( you make this difficult to do for your information)”* Ref.161103-002258, 2016

*“Your service would not let me cancel my service with you. I keep trying too but no luck.”* Ref. 170219-000237, 2017

*“I had difficulty cancelling my account because your sight is confusing.”* Ref. 170109-004559, 2017

*“You should be able to cancel with a click. Way too complicated.”* Ref. 170125-002846, 2017

*“This site makes it easy to join and imposibale to cancl.”* Ref. 170206-002873, 2017.

*“Trying to unsubscribe is difficult if not impossible for a Layman. I'm sure you have designed it that way purposely. Good job!”* Ref. 170313-003765

*“I am very dissatisfied with match.com as a whole. Several months ago I search for a very long time on your website to try to find out how to cancel my subscription and could not find it anywhere on your website and also could not find any phone numbers to call you. I ended up having to cancel the subscription through my bank or maybe it was through the apple app subscription menu. I spent at least an hour trying to make sure I did it correctly and felt VERY frustrated I couldn't find something on your site to cancel it directly*

*with you. The only thing I could find was a button to say I wanted to extend my subscription. I feel like this is a very Fraudulent way of doing business...” Ref. 180207-002395, 2018.*

*“I attempted to cancel this membership on the app in April however must have gone through only 7 of the 8 “are you sure?” steps to cancel so apparently it didn’t go through.” Ref. 160627-004815, 2016*

*“Also, when a customer is turning off auto-renewal, when it gets to the final page on the match website, I highly suggest saying ‘you have chosen to turn off auto-renewal’. Match needs to literally spell out what the customer has done. Saying I had cancelled my subscription made me believe I had shut down my account completely.” Ref.170307-003258, 2017*

Believed had Canceled: The next largest category of submissions were from customers who believed they had canceled their subscriptions, only to discover that they were still being charged. The comments below illustrate the difficulty customers had with the process: they thought they had canceled but after being charged again discovered that “you hide an additional, final cancellation button at the end of the process” or that “you have to click cancel a third time on a link that is impossible to even see in a sea of words.” However, there are also mentions of auto-renewals in many of these complaints, highlighting that there may have been additional complexities in the process for customers who were enrolled in an auto-renewal subscription; while examining the specific interaction between auto-renewal accounts and cancellation was outside of the scope of my report, it is worth mentioning this interaction. In sum, these customers believed they had successfully completed cancelling their subscriptions, only to discover after being charged again that this was in fact not the case. In the words of one: “It should be just as easy to cancel as it is to join.”

*“The cancellation process is confusing and misleading. It is designed to fool people into believing they have canceled the service when they have not.” Ref. 160315-000615, 2016*

*“The site does not make it clear how to cancel reoccurring billing. (...)I tried to cancel on site and thought that it was canceled. I could have known that it was canceled prior to receiving a deduction from my bank*

*account if it was more assessable to cancel through site settings. It should be just as easy to cancel as it is to join.” Ref. 160818-003734, 2016*

*“I cancelled my account earlier this year in February, but just realized you are still charging me (both in May and just last week in August). After going back through your cancellation process, I see that the issue here is in that you hide an additional, final cancellation button at the end of the process.” Ref.160824-003663, 2016*

*“Here I thought that I had cancelled my match account and wouldn’t be charged anymore but looks like it wasn’t cancelled. Maybe make it more easier for ppl to cancel out and this way they understand and won’t be charged. (...) Maybe clarify things easier and not in small print so others can see how this refund works.” Ref.161018-003713, 2016*

*“I had followed all steps to cancel subscription and here I am with another charge.” Ref.161230-001854, 2016*

*“Your website makes it difficult and tricky to cancel a subscription. I tried to cancel weeks ago and thought I had cancelled after I hit cancel and gave my reason for leaving. It is only after I got re-billed that I went on to the site and realized you have to click cancel a third time on a link that is impossible to even see in a sea of words.” Ref.170228-007621, 2017*

*“The process to cancel is extremely deceiving. I cancelled my subscription months before it was due so I wouldn’t get charged. Little did I know cancelling a subscription does not mean you won’t get charged a renewal.” Ref. 170206-004250, 2017*

*“I cancelled on January 20. Went through multiple screens. Cancel. Cancel. Yes continue cancel and so on. I got charge today. Went back and went through many many screens to learn it was not complete in cancel. You are misleading customers.” Ref. 170227-002202, 2017*

*“You’ve deliberately set your account termination process to be arduous, confusing and have built in uncertainty as to completion of the cancellation process. After three attempts, and \$75.00 later along with several phone calls I finally completed the termination proces.” Ref. 170411-000974, 2017*

**Multiple Steps:** in many of these complaints, customers made specific mention of the many steps required to complete the cancellation process, most arguing that they had failed to accomplish them.

*“Your system for resigning membership is not user friendly in any aspect. I thought I had resigned 10 days ago, but surprise - I must have missed one of many clicks required to resign. Left a very bad taste.” Ref. 160526-001781, 2016*

*"I just wanna shut it down but it keeps re-routing me"* Ref.161119-000404, 2016

*"The process to quit Match is very convoluted and I can't help but believe it is by design."* Ref. 180207-001361, 2018

Password Issues: As discussed earlier, the inclusion of the password screen in the cancellation flow creates a barrier for customers to cancel their subscriptions, particularly if they have misplaced or can't remember their password. In contrast to Ward's assessment of the password screen, some customers report issues with the password flow, including being unable to update a password, requiring a phone call in order to make changes to their account.

*"tried to do it as I explained earlier by going into my account when it asked for my pass word it would not takeit so I could not cancel out"* Ref.160611-001910, 2016

*"I am trying to cancel my membership. It does not let me type my password."* Ref. 160810-003349, 2016

*"My dissatisfaction with the site has to do with the obstacles presented in contacting you short of making a phone call. When I attempted to cancel membership online, I could not sign in to that part of the website. When I attempted to send an email, I was given an error message. The phone call went well. Overall, the impression I was left with was a strategy to make it as difficult as possible to cancel."* Ref. 170203-003402, 2017

*"I wouldn't have had to call at all if your online services to close my account had worked better! I tried 3 times to change my password in order to get to the account settings screen & finally gave up & called."* Ref. 170112-003605, 2017

*"I tried to cancel my account on the day it renewed, however, I could not get in to the 'cancel' area (wouldn't take my password)."* Ref. 160525-004002, 2016

*"I want to cancel and it keeps coming up saying wrong email."* Ref. 160430-000858, 2016

Delete Personal Data: comments in this category raise questions about whether customers understood the distinction between deleting one's profile and canceling their subscription. Meaning, some customers may have believed that deleting their profile was equivalent to canceling

their subscriptions, and that the site did not clearly distinguish the difference or clarify that deleting one's profile would not end their subscription.

*"It shouldn't be so difficult to find a link on your site to completely delete your profile!"* Ref.170227-005710, 2017

*"appreciated when my PROFILE and NAME is completely RID of MATCH"* Ref.160820-000305, 2016

*"I asked to have my account closed from the site. After 4 attempts to explain to customer service that I didn't want my account hidden, password changed or anything like that, she finally deactivated my account. Just goes to show how much you can't trust the Match site. It is a dangerous place to be."* Ref. 170303-002505, 2017

*"No one has actually gotten back to me about fully canceling my account. I've tried several times to close it, and it should even be expired at this point, but my profile is clearly still active, because I keep receiving emails from men. I NEED MY ACCOUNT TO BE FULLY DELETED ASAP."* Ref. 170327-000363, 2017

Auto Renewal Issues: As mentioned above, there were some comments classified by Match.com agents that focused on or included issues related to auto-renewing subscriptions. It was beyond the scope of my report to delve into issues with auto-renewal, but the number of comments that mention it raises questions about whether accounts with auto-renewal subscriptions added additional complexity to the cancellation process, including whether one could cancel a subscription without explicitly turning off the auto-renewal function first. Either way, what is clear is that the auto-renewal function only made the cancellation process more challenging for customers.

*"auto renewal is deceiving and hard to cancel."* Ref. 160209-002540, 2016

*"Why does Match.com make it so terribly difficult to end a subscription, or to cancel automatic renewal(which is a repugnant aspect of your service)? Why not list a Customer Service phone number as you had in the past- for a service that advocates personal communication, it is hypocritical not to do so."* Ref.170221-004181, 2017

*"I had no clue about the automatic renewal or how to turn it off."* Ref. 161230-001757, 2016

*“It is unclear that cancelling a Match membership doesn’t cancel the payment - absolutely absurd. Then, when I was charged again, I was informed I can only be refunded about half of my money. Prior to this experience, I recommended Match to many people, but I will stop doing so.”* Ref. 170209-003323, 2017

Other Issues: Finally, comments categorized as “other” were a mix of complaints about poor service, customer service reps, refunds, policies, and direct requests to cancel subscriptions—again, presumably because customers could not locate a simple and direct way to cancel on the site.

*“Just wanted to cancel my membership with a quick phone call. and not have to go through all of these questionnaires.”* Ref. 170110-007655, 2017

*“UNSUBSCRIBE ME FROM THIS SERVICE!!”* Ref. 170322-000464, 2017

*“I don’t need speed answering a query when the answer is not what I am looking for. I was charged today for a service that I do not want and I did not authorize. There is no clear cancellation process on your site. You should really send out a notification before you charge accounts to ensure that we actually want to renew. Every other autopay service does that, why not yours? It is a simple courtesy.”* Ref. 180119-003109, 2018

#### *D. Older Customers*

One notable element of the Match.com comments dataset is that it contained customer email addresses, and as I reviewed them I observed what looked to be an unusual number of email addresses that suggested an older aged customer base, most notably emails originating from AOL.com and Hotmail.com<sup>40</sup> email services. These services were among the first to offer the public free email services, including later RocketMail (which was purchased by Yahoo!), Yahoo! Mail, and MSN.com.<sup>41</sup> Google launched Gmail in 2004, and the growing dominance of Google’s

<sup>40</sup> <https://profgerhardt.com/the-hotmail-generation-what-could-your-email-address-say-about-your-age/>.

<sup>41</sup> <https://www.msoutlook.info/question/switch-to-outlookcom-address>.

services has made Google accounts (including Gmail) one of the most popular services in the world, with over two billion users.<sup>42</sup> As one company's analysis of their customer base demonstrates, "Boomers are more likely to use AOL while Gen Xers tend to use Hotmail and Yahoo more than other age groups, and millennials are firmly Gmail users."<sup>43</sup> Pew Research places the cut-off age between Millennials and Generation X and older at 1980, meaning that the oldest Millennials in this dataset starting in 2016 would have been aged 35 (today age 42).<sup>44</sup>

In the complaints I reviewed, the largest number, unsurprisingly, used a Gmail address (43.2%, 983). The next largest groups were: Yahoo.com (18.8%, 428); Hotmail.com (8.6%, 196), AOL.com (5.5%, 124); Comcast.net (2.7%, 62); MSN.com (1.7%, 38); ATT.net (1.1%, 26). While I would argue that ISP-specific email addresses also likely suggest older users given who is most likely to pay for broadband services, even ignoring those email users, 34.6% of the customers in this complaint pool used an email address that is associated with a legacy email service. Combined with the Gmail users, this accounts for 77.8% of the customer pool; the other 22.2% did include additional ISP providers (e.g., Shaw.ca; Verizon.net, Bellsouth.net), but at smaller numbers, and other less popular legacy providers (Live.com).

After reviewing and classifying comments for the issues discussed in the sections above, I then searched the comment text using terms such as "older, senior, retire" to see if any comments explicitly discussed the customer's age. I located seven with explicit mentions of being an older user, with four of the seven falling within the email address parameters I discuss above. Again, this group is of particular concern because, being less experienced with online services than

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<sup>42</sup> See generally: <https://www.demandsage.com/gmail-statistics/>; statistics vary, but global use appears to be closer to four billion.

<sup>43</sup> <https://www.earnest.com/blog/what-your-email-says-about-your-education/>.

<sup>44</sup> <https://www.pewresearch.org/politics/2015/09/03/the-whys-and-hows-of-generations-research/>.



younger users, they are a group particularly vulnerable to dark patterns and complex and confusing user interface design.<sup>45</sup>

*"I'm 55 yrs old I'm not a computer person I've tried to find to cancel your web site has no ph number. You guys make it almost to cancel. You took money last night I will write bad reviews and tell about the woman cons on there now that try to get you to pornsites. Its wrong I have used your service time and time again. I would think that since its with in 15 hrs of you getting your money the you would fix the issue. Porn on Match.com Thanks Tracy"* Ref.170216-005404, 2017, personal domain address

*"I cancelled my subscription on Sept 07, 2016, and was charged \$97 plus. You sent me a refund of \$20.01 and kept \$57 of my money. I am a senior, on fixed income at 81 yrs. old and had been a customer for a long time. ANd then you rip me off. Called twice and wrote a letter to the CEO of Match.com and have not heard from him/her. Your org. is immoral and unjust. The site is good but the ability to enter and cancel is extremely difficult, on purpose? ? I now know I am dealing with immoraiity, I am a theologian and recognize that. I guess you are telling me by refusing to pay the balance: 'Tough sh\*t, Paul.'" Ref.160926-001124, 2016, Gmail address*

*"I am very disappointed that I didn't get a full refund. My credit card was billed December 11/2016 and I phoned to say I did not give permission for this to be charged. I phoned December 14th 2016 a few days after I was billed. I was told there was a spot where I was suppose to check for my card not to be automatically charged which I didn't see. I was not refunded the full amount and feel that is totally wrong. I also asked if my credit card could be removed and I was told no it couldn't be. That is not satisfactory and don't understand why it can't. I am totally unsatisfied with not getting a full refund. As a 59 year old person the computer can be difficult to understand at times and did not see this option. I didn't want my credit card to be automatically charged."* Ref.161214-000625, 2016, Hotmail address

*"I did not want to renew. I took everything off my account 2 weeks ago. I could not find anyway to cancel. It is not right to do customers that way. I am retired and living off SS. It is not right and you know it. I want the full amount deposited back into my account. Very dissatisfied Customer"* Ref.170821-000546, 2017, Yahoo address

*"I have tried to cancel this since day 2. I got no answers from my messages and you billed me for a month and then tried to bill me for 3 months. Finally I waited on phone to I tunes and that cancelled and returned money. The people you showed look like serial killers and molesters. One guy was 20 something and I am 70 widowed I said I could be your mother he said I like older women!! Sick"* Ref.170818-004608, 2017, Comcast.net address

*"Match, unlike seniorpeoplemeet.com, does NOT have a menu choice to turn OFF automatic renewal nor to hide my profile. Instead, I must call for a rep. to do that. Worse, Match has no record of my email,*

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<sup>45</sup> See generally: Hunsaker, A., & Hargittai, E. (2018). A review of Internet use among older adults. *New Media & Society*, 20(10), 3937–3954; <https://theconversation.com/older-americans-are-given-the-wrong-idea-about-online-safety-heres-how-to-help-them-help-themselves-177215>; <https://www.pewresearch.org/internet/2006/04/11/are-wired-seniors-sitting-ducks/>.

\*\*\*\*\*@yahoo.com, which I use whenever I login. Nor do you have a record of my user name, \*\*\*\*\*. The rep. needed my first and last name and my zip to find my account. All these obstacles are frustrating. My not being able to turn off automatic renewal evokes suspicion about your true motivation. I am VERY dissatisfied.” Ref. 160401-001576, 2016, Yahoo address

Agent: “Member wants the cancellation of subscription more user-friendly in terms of older users (grandpa, grandma, etc) since they are not used to new technology as this is new to them.” Ref. 170808-004795, Gmail address

### *E. FTC Complaints*

As a supplement to concerns raised in complaints provided by Match.com, I reviewed complaints from the FTC’s Sentinel database. I reviewed roughly fifty complaints from 2016 onward, identified by keyword search based on concerns directly raised in the Match.com complaints discussed above: “confusing,” “misleading,” “auto renewal,” “password,” “steps” (in reference to the steps required to complete cancellation). These complaints elaborated or added context to the concerns raised above. The FTC complainants also raised the issue of Match.com’s convoluted cancellation process and interface. A common observation was that a customer would believe they had canceled, or in some instances appear to have successfully canceled (e.g., received the cancellation email) only to still be charged an auto-renewal membership fee. From 2016 onward, 66 complaints specifically mentioned the word “deceptive,” referring to Match.com’s offers, sales practices and cancellation processes. Overall, according to these customers, Match.com *consistently* assessed customers unauthorized charges for services they did not desire, charged them after they had canceled or believed they had canceled, and failed to provide adequate customer support to remedy these issues.

Unable to Cancel: Similar to the Match.com customer comments above, customers reported confusing interfaces and task flows as hindering their ability to cancel.

*“Also, as I stated previously, their cancelation procedure is confusing, making one think they’ve canceled, when the help button actually cancels the cancellation.”* Originator Reference Number: 8750091388697, 2016

Believed Had Canceled: In several instances, customers reported taking all the “necessary steps” possible towards cancellation, even receiving confirmations for membership cancellations. This, however, did not stop their accounts from being charged.

*“I completed the necessary steps then logged out and removed the match app from my phone. I have not since logged in under the impression I had successfully removed the auto renewal and cancelled my subscription. After a couple months, after reviewing my bank statement, I realized I was still being charged”* Originator Reference Number: 8750091437051, 2018

*“The menus are so confusing on your website to cancel your membership and you can not shut off the auto subscription, but yet your bot says I cant get a refund because it is on auto renew! Total scam!”* Originator Reference Number: 8750091564376, 2021

Multiple Steps: Customers reported confusion with the multiple steps required to cancel, highlighting that many could not navigate the process and often thought they had completed the process when they had not.

*“Even though I cancelled my account online and by phone I was still charged.I phoned Match.com and advised that I did not want to automatically renew my membership. I also went online to cancel and declined their half price offer. My account was charged anyway.... This is unfair and should be illegal. I took all the necessary steps and still had to fight with them to get the charges reversed.”* Originator Reference Number: 8750091483557, 2019

*“Called match and explained that I cancelled according to how their website instructs us to do through our phone settings. They never give a second option on website of how to cancel. Now they say that I needed to take more steps to have canceled. Such a scam.”* Originator Reference Number: 8750091359573, 2016

Delete Personal Data: Complainants reported deleting their profile or information from their profile in order to cancel subscription services. These attempts were unsuccessful. In several cases, customers reported that they deleted personal data *in addition* to canceling their subscription online, only to be met with continued charges to their account. These examples reveal: (a) lack of clarity on “deletion” versus “cancellation”; and (b) failure to regard customers’ wishes towards data removal.

*“I asked them to DELETE my account, they said they HID my account. I asked again to remove ALL OF MY INFORMATION from their site, they refused.”* Originator Reference Number: 8750091428628, 2017

*“I cancelled service \* 9 \* days prior my subscription end date including the following: (1) deleted both text and photos of my profile, (2) selected ‘cancel subscription’, (3) deselected ‘share profile with affiliates’. The subsequent webpage asked reason for cancellation then ended with ‘sorry to see you go’ message, leading me to believe the subscription was canceled. In mid December there was the charge for renewal on my credit card bill....It is not logical that I removed my profile details (deleted text, photos, changed my status to ‘hidden’, again deselect the ‘share profile with affiliates’) but not cancel auto-renew.”* Originator Reference Number: 8750091434817, 2017

*“I unchecked the auto renewal box, deleted my card information and logged out, then about a week later I checked the activities on my visa and it has been charged”* Originator Reference Number: 8750091379945, 2016

Auto Renewal Issues: Several FTC complainants found issue with Match.com’s auto renewal process, highlighting how auto-renewals led to additional levels of confusion for customers regarding how to effectively cancel.

*“Misleading auto-renewal practices, combined with very confusing cancellation process left me with \$102 in charges for months I thought I had canceled.”* Originator Reference Number: 8750091368985, 2016

*“I canceled my account on 12/14/2016 and received a cancel confirmation letter that same day yet they billed me again on 02/11/2017. When I called to complain they told me since I didn’t get*

*a cancellation confirmation number in my email, the cancel was not valid (their fault)."*

Originator Reference Number: 8750091402527, 2017

Password Issues: Customers reported a variety of issues relating to the password requirement in cancellation. Many of these issues stem from consumers' inability to easily reset their password. This issue is concerning as the only way to cancel a subscription on Match.com is by re-entering one's password through a reCAPTCHA window. It remains unclear from a service perspective why these password reset errors occur at cancellation, even after reaching out to customer support representatives.

*"I requested the link to cancel my months ago. I noticed today that I was charged 80.00. I never received the email link. The company is not sending the email link to reset passwords. As a result i have been unable to cancel my membership. I have requested the link in the past and not received."* Originator Reference Number: 8750091572538, 2021

*"Apparently, if you didn't receive a email confirmation with a confirmation number of cancellation, you missed one of the 5 steps of cancellation, which includes having to enter your password multiple times. After researching this issue, it appears that this is a very common experience and the company makes it as difficult as it can to cancel subscriptions"* Originator Reference Number: 8750091368985, 2016

*"Match.com the website has alot of password reset errors. I've been locked out of the site for months (I belive it was 4 months). Even in their records I've been locked out of the site since late February. I requested they cancel my profile since it stopped working. They refused."* Originator Reference Number: 8750091369006, 2016

#### *F. Customer Comment & Complaint Summary*

In summary, the Match.com customer comments and complaints to the FTC provide a rich and in-depth look into the first-hand experience of actual Match.com customers' experience with the cancellation process. Unlike Ward's sunny assessment of the cancellation flow, these comments illustrate the confusion and frustration customers experienced with the cancellation flow. Further, they demonstrate with great deal and precision the usability flaws inherent in the flow, something that Ward's flawed user study simply does not capture. Customers repeatedly

attest to how difficult they found the cancellation process, how many thought they had canceled but in fact had not, and how these customers struggled with the overly complex multi-step process, particularly Match.com's older customer base. Repeatedly, the customers themselves state that they wish the process was simpler and that it appeared to be difficult by design. In contrast to Ward's assertion that "Match.com could hardly make it more clear or simple to cancel,"<sup>46</sup> one customer sums it up: "This site makes it easy to join and [impossible] to [cancel]."

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<sup>46</sup> Ward Expert Report, paragraph 38.

## Section 6: Conclusion

In conclusion, Ward's report suffers from numerous errors in method, omission of key evidence, a disqualifying user study with a flawed research design, and manipulation of the results he presents from this study. These are all reasons to question his findings. However, as my review of customer comments to the company, as well as complaints to the FTC demonstrates, the company's own customers provide incontrovertible, first-hand evidence that the cancellation flow was neither simple nor easy for many customers to use, resulting in failed cancellations and customer frustration. Furthermore, this burden was most likely to fall upon older users who were less experienced Internet users and more vulnerable to dark patterns, like those present in the cancellation flow.

The analysis and opinions contained in this report are based on information available as of the date of the report. I reserve the right to supplement or amend this report should any additional information become available including, but not limited to, any expert reports submitted on behalf of defendants, deposition transcripts, and other information unavailable as of the date of this report.

I understand that this report may be used in a law enforcement proceeding. Pursuant to 28 USC Section 1746, I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct to the best of my knowledge and belief.

A handwritten signature in black ink that reads "Jennifer King, Ph.D." The signature is written in a cursive, flowing style.

/S/

Jennifer King, Ph.D

May 15, 2023

Berkeley, California



# EXHIBIT 4



# Rebuttal of Dr. King's Report Regarding Match.com's Online Subscription Cancellation Flow

May 15, 2023



## I. ASSIGNMENT

1. I was retained by Sidley Austin LLP on behalf of Defendants Match Group, Inc. and Match Group, LLC in this matter. In this report, I have been asked to review, evaluate, and respond, if appropriate, to the opinions offered in the report in this case by Dr. Jennifer King on behalf of the FTC. In this report, I assess the methodology used by Dr. King in her purported heuristic evaluation of the usability of Match.com's online cancelation flow and her conclusions derived from that evaluation.

## II. QUALIFICATIONS

2. My qualifications are described in my opening report in this matter, dated January 13, 2023.

## III. SUMMARY OF DR. KING'S METHOD & CONCLUSIONS

3. In her report, Dr. King explains she was asked by the FTC to evaluate Match.com's cancelation flow based on the following inquiries:
  - a. Was Match.com's cancelation process easy to use?
  - b. Was Match.com's cancelation process easy to find?
4. Dr. King conducted no empirical research to support her conclusions. Dr. King conducted no objective analysis.
5. Instead, Dr. King used what she says was a heuristic evaluation-only approach to assess the cancelation flow on Match.com's website, which involved only a visual review of the Match.com flows conducted by viewing (i) recordings of the Match.com website as it appeared between 2016 and 2022, and (ii) screenshots from around the same periods. She also reviewed a few internal Match.com communications. It does not appear that Dr. King ever interacted with a live version of the website

herself. Nor did she interact with, interview, or study the actual behavior of any Match.com subscribers or potential Match.com subscribers. Had she done so, she likely would have evaluated things quite differently and may have been better able to recognize the ease and simplicity of the flow.

6. Dr. King identified factors for evaluation, compared representations of the Match.com cancelation flow to these factors, and made observations about each factor to inform her conclusions for the two assigned questions. The factors Dr. King applied to the Match.com cancelation flow include Placement and Prominence, Appearance, User Flow Architecture, System Status and Feedback, Terminology/Content Strategy, Readability, Friction, and Dark Patterns. Dr. King opines that these factors are “most relevant to a usability inspection of disclosures or other information communicated to users by an interface,”<sup>1</sup> but it is unclear how or why Dr. King selected these particular factors as most relevant.
7. Dr. King formed conclusions about the Match.com cancelation flow for three of ten of Nielsen’s Usability Heuristics<sup>2</sup> by discussing screenshots and articulating her observations about each factor. She supported some conclusions by citing usability guidelines, definitions of various dark patterns, and the Nielsen Norman Group Guidelines. She supported other conclusions with her experience as an academic in the Human-Computer Interface (HCI) field, her knowledge of the relevant research and publications, and her personal perceptions of the material.
8. Dr. King concluded the Match.com cancelation flow was not simple or easy to do or find. However, she offers no evidence or supporting data that support that opinion. Furthermore, Dr. King’s heuristic conclusions are based on an evaluation that has significant limitations, includes no supporting data for her

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<sup>1</sup> Page 12

<sup>2</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

conclusions, may have been biased by her work with dark patterns, and includes several factual

inaccuracies giving rise to a range of interpretations, which I explain below.

## IV. SUMMARY OF REBUTTAL TO DR. KING'S REPORT

9. Dr. King's analysis and opinions are unsupported and unreliable. In fact, the objective evidence affirmatively contradicts Dr. King's opinions. Dr. King's analysis suffers from several fatal flaws that render it unreliable.
10. First, Dr. King conducted no empirical study or test to determine how customers actually used or interacted with Match.com's cancelation flow. No expert opinion is as reliable as an empirical study, like the one I conducted. Dr. King's report is replete with speculation about what users *might* believe or experience, without any supporting evidence.
11. Opinions on whether a task is easy or simple to find and do must be tested using a standard usability testing methodology, based on sufficient and reliable evidence, and protected from contradictory interpretations to be reliable. Any heuristic or expert analysis must be bolstered by such objective evidence.
12. Second, Dr. King did not conduct a proper heuristic or usability analysis. Indeed, she did not even actually use Match.com's cancelation flow. One cannot offer even a personal opinion on how the cancelation process works or how simple it is, without using it. That is why I personally went through the cancelation flow several times. Dr. King did not at all. Instead, she relied on videos or screenshots, but that is simply not how actual customers see and use the flow, nor a reliable way to experience something for oneself. Had she actually experienced the flow for herself, she likely would have evaluated things quite differently and may have been better able to recognize the ease and simplicity of the flow.

13. Third, Dr. King used only a subset of the factors necessary for a heuristic analysis. She cherrypicked factors that (she thought) supported her view while ignoring the other factors. An objective analysis looks at all of the factors in the literature (as I did) and applies them to the facts without bias.
14. Setting aside methodology, Dr. King also errs substantively in conducting her analysis. Several of her descriptions of the site are factually inaccurate (perhaps due to her lack of firsthand use of the site), and even where she correctly describes a component of the site, her heuristic analysis is myopic and ignores important context that is relevant to a user's use of the site and therefore usability.
15. Finally, and perhaps most importantly, the results of my usability study (as described in my opening report) and Match.com's actual subscriber data disprove much of Dr. King's speculation about how subscribers experience Match.com's cancelation flow. Even if Dr. King personally believes that the Match.com cancelation flow is not simple or contains confusing "dark patterns," actual Match.com users and usability study participants have spoken and disagree.

## V. ASSESSMENT OF DR. KING'S METHODOLOGY

### I. Dr. King Provides No Empirical Evidence or Objective Analysis

16. The most fundamental problem with Dr. King's analysis is that she does not offer any empirical evidence or objective analysis for her conclusions. Instead, Dr. King looked at a few screenshots and videos of Match.com's cancelation flow and provided her subjective opinion on it. Dr. King then repeatedly speculates about what users "may," "might," or "could" experience, without any objective evidence of what users actually experienced to support her claims. The only way to truly know how users respond to the cancelation flow is to test it. That is why we have the field of usability testing and research. Even the most esteemed expert cannot tell you how ordinary users will respond to a user interface or cancelation flow. "User interfaces and human behavior are both so complex that the interaction between the two does not lend itself to pure guesses based on personal opinion. You need data to learn what works, what

doesn't work, and what users really need. Can't guess. Don't do it. You can't learn UX from within your own echo chamber."<sup>3</sup> That is why I tested empirically, with actual consumers, whether Match.com's cancelation flow is simple or not. That empirical data showed that:

- a. **98.78% successfully found Manage Subscription**, the entry point to canceling
- b. **91.5% successfully canceled**, with an average time of **74 seconds**, on average **6.1 times faster** than subscribing, making it even easier than the sign-up process (i.e., creating an account and subscribing)
- c. Match.com received an **"A Grade" (81.6)** on the System Usability Scale
- d. **88.3% of participants thought canceling was simple** or were at least neutral as to the simplicity/difficulty
- e. **84.7% of participants thought canceling was at least as simple as signing up**

17. This empirical and objective data from real consumers is far more persuasive than any subjective heuristic analysis done by an expert witness hired by a party.

18. Indeed, a purely subjective approach is not reliable. Dr. King herself cites<sup>4</sup> an article that points out the dangers of relying solely on heuristic analyses, including the risk of bias and the risk of uncovering low-severity problems. This article describes how only doing a heuristic analysis "...can cause disadvantages such as the *risk of bias* and the risk to uncover *low-severity* problems that aren't big problems at all (false positives). Another problem is that we don't consider the context of the user when we do usability inspection [expert analysis] methods...For that reason, it's always a good idea (especially because we are the advocates for our users and hence "User Experience" professionals) to bring the real user to the table from time to time, see what they do, see where they struggle, and hear what they have to say instead of

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<sup>3</sup> <https://www.nngroup.com/articles/user-exposure-goals/>

<sup>4</sup> Page 10

her analysis.

19. Similarly, Dr. King’s citation of Usability.gov likewise identifies the disadvantages of a heuristics-only analysis. The article explains how heuristic analyses can provide value when used *together with* other testing methods, but expressly warns that “[a] heuristic evaluation should not replace usability testing.”<sup>6</sup> Usability.gov also recognizes that a heuristic evaluation “may identify more minor issues and fewer major issues.” And, recognizing that personal bias may affect results, the article recommends using “multiple experts and aggregat[ing] their results.” Dr. King did none of this. She, therefore, failed to comply with the U.S. government’s own guidelines.
20. Given Dr. King’s area of study and focus on dark patterns, Dr. King may be particularly prone to or biased toward “uncover[ing] low-severity problems” that are more relevant to her work, but less likely to impact an actual subscriber’s use of the site.
21. In short, Dr. King’s expert report is based only on her personal opinions as a “dark pattern” researcher and not based on rigorous research methods. Thus, Dr. King’s opinion cannot be relied upon as an accurate representation of reality for millions of Match.com subscribers.

## II. Dr. King’s Analysis Is Unreliable

22. The second fundamental flaw with Dr. King’s report is that she did not conduct a valid heuristic usability analysis. The whole point of a heuristic analysis is to analyze the user interface by using it yourself, then apply your expertise to identify potential problems that you had or observed. This requires an expert to actually engage with the user interface. Here, that means to cancel a paid Match.com subscription. For me

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<sup>5</sup> <https://modus.trimble.com/news/2021-04-15-usability-inspection-methods/> (emphasis added)

<sup>6</sup> <https://www.usability.gov/how-to-and-tools/methods/heuristic-evaluation.html>



to conduct my heuristic analysis I signed up and went through the subscription cancelation process many different times.

23. Dr. King, on the other hand, did not actually use the Match.com cancelation flow even once. Dr. King attempts to offer an opinion on the usability and simplicity of the cancelation flow having never used it. This violates a cardinal principle of what we as usability experts do. Instead, Dr. King relied only on static screenshots and videos prepared for her showing others walking through the flow (not actual customers, or usability participants). That is simply not a reliable methodology to conduct an analysis and it violates the very underpinnings of a proper usability and heuristic analysis. “If the users have not actually tried to use the designs, they'll base their comments on surface features. Such input often contrasts strongly with feedback based on real use.”<sup>7</sup>

24. In addition, Dr. King also relies on several “internal company documents discussing the cancellation flow.”<sup>8</sup> Dr. King is apparently referring to internal Match.com emails repeating what customers claimed were concerns about cancelation from subscribers who had reached out to Match.com. But Dr. King’s analysis here is neither objective nor reliable. She did not rely on a balanced collection of documents. Instead, she relied only on feedback from a group of people that is inherently self-selecting and leads to biased results because it is not feedback from a fair representation of all subscribers. As recognized by a leading authority on user design, “[u]sers often make requests for changes to user interfaces that might work for them but would have a negative impact on the majority of the users in your target market.”<sup>9</sup> Dr. King ignores, for example, the millions of subscribers who were able to successfully cancel their Match.com subscription via the online cancelation flow, focusing instead on the small percentage of

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<sup>7</sup> <https://www.nngroup.com/articles/first-rule-of-usability-dont-listen-to-users/>

<sup>8</sup> Page 8

<sup>9</sup> <https://www.uxmatters.com/mt/archives/2011/03/the-dangers-of-design-by-user.php>

users who **alleged** difficulty with cancelation, regardless of whether they actually attempted online cancelation.

25. Next, the usability guidelines on which Dr. King relies are, at most, best practice rules of thumb; they are not “fixed rules” or mandatory requirements.<sup>10</sup> Guidelines are not “rigid standards that can form the basis of a contract or lawsuit.”<sup>11</sup> Put differently, even a website that does not satisfy all of the usability guidelines may still be “easy” or “simple,” especially because guidelines may require adaptation depending on the type of website (e.g., informational versus e-commerce).<sup>11</sup> Yet Dr. King never explains how she translates the alleged “violation of usability heuristics” she finds into the conclusion that Match.com’s cancelation flow is not easy to find or easy to use.

26. Similarly, Dr. King claims to have identified several “dark patterns” in Match.com’s cancelation flow, but she does not explain at what point a dark pattern (or dark patterns) makes a website not easy to use. It is unclear what standard Dr. King is using to determine if or how any purported dark pattern translates into “not easy to use” or “not simple.” She also doesn’t identify how common the alleged dark patterns she claims to have found on Match.com are on other sites. I do not mean to say commonality is a defense against the use of a dark pattern; rather, a common pattern found across many experiences across the web decreases the risk of consumer confusion if consumers are familiar with the pattern. Indeed, Dr. King herself notes “[i]t’s the subversion of users’ expectations with respect to these common design patterns that creates confusion, manipulation, and deception (i.e., dark patterns).”<sup>12</sup> Dr. King also does not indicate

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<sup>10</sup> Michael O’Leavitt and Ben Schneiderman, “Foreword,” Research-Based Web Design & Usability Guidelines, 2006, p. xix, available at [https://www.usability.gov/sites/default/files/documents/guidelines\\_book.pdf](https://www.usability.gov/sites/default/files/documents/guidelines_book.pdf)

<sup>11</sup> Michael O’Leavitt and Ben Schneiderman, “Foreword,” Research-Based Web Design & Usability Guidelines, 2006, p. iii, available at [https://www.usability.gov/sites/default/files/documents/guidelines\\_book.pdf](https://www.usability.gov/sites/default/files/documents/guidelines_book.pdf)

<sup>12</sup> Page 21

how many dark patterns, or what combination of them, would push an experience over the line from

“easy” to “not easy.”

27. In fact, it is unclear what standard Dr. King used to determine what is “easy.” She does not provide any criteria for determining the point at which something becomes “not easy.” In contrast, the data and conclusions presented in my opening report are based on a combination of my own experience and analysis, as someone who has worked directly in this field and actually designed websites and apps, as well as research-based data from usability study participants, the results of which clearly show that Match.com’s cancelation flow is easy and simple to use.

28. As another problem, Dr. King evaluated in her report only three of Nielsen’s ten usability heuristics (and claims that Match.com’s cancelation process does not satisfy any of them).<sup>13</sup> Dr. King does not explain how she selected these heuristics and why she ignored others. By omitting usability principles, there is a risk of incomplete and erroneous analyses of users’ true and actual perceptions of the cancelation flow.

29. In my opening report, by contrast, I evaluated all ten of Nielsen’s usability heuristics, plus Nielsen’s 5 quality components of usability, and concluded that Match.com’s cancelation flow satisfied all of them.

30. Based on the flaws in Dr. King’s heuristic analysis, her methodology is not reliable.

## VI. ASSESSMENT OF DR. KING’S CONCLUSIONS REGARDING THE USABILITY OF MATCH.COM’S CANCELATION FLOW

31. In this Part of my rebuttal report, I respond to Dr. King’s analysis of the usability of Match.com’s online cancelation flow. I begin with a section responding to Dr. King’s characterization of particular pages of the

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<sup>13</sup> I disagree with Dr. King’s conclusion that Match.com’s cancelation flow does not satisfy the three heuristics that Dr. King addresses. I address that disagreement below in [Part VI.II](#).

flow. I then address Dr. King's version of a Nielsen usability heuristics analysis, and then her "dark patterns" analysis.

## I. Response to Dr. King's Opinions About Particular Pages of the Match.com Cancellation Flow

32. Dr. King criticizes a few pages in the Match.com cancellation flow for a variety of reasons. Before addressing the details of Dr. King's purported heuristic and dark pattern analyses, I respond to Dr. King's comments about some of the particular pages in Match.com's cancellation flow.

### Reauthentication Page<sup>14</sup>

33. Dr. King argues reauthentication (i.e., requiring entry of a password) in order to manage a customer's subscription information (including updating payment/subscription information, or canceling payment/subscription) is an unnecessary step and therefore makes the flow not easy. However, she fails to cite any evidence, literature, or other experts to support this claim. In fact, although she claims that "literature from computer security experts and practitioners" supports her conclusions that the reauthentication page is unnecessary, she does not identify the literature on which she claims to be relying. I thoroughly covered why reauthentication at this stage does not detract from the simplicity of the cancellation process in my opening report. Here, I respond to Dr. King's specific comments regarding reauthentication.

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<sup>14</sup> As explained in my opening report, Page 15, I do not consider the reauthentication page part of the "cancellation flow," because a user could visit that page for reasons entirely unrelated to cancellation (such as checking a subscription status). Moreover, no reasonable user could legitimately believe that they had successfully canceled by getting only to the reauthentication page (but not completing it). Thus, the reauthentication page arguably is irrelevant to any analysis of the "cancellation flow." Nevertheless, I respond to Dr. King's opinions about that page.

34. Dr. King claims that “the password screen was arbitrarily placed in the cancellation flow,”<sup>15</sup> and that reauthentication “...introduces delay into the process, which can vary by user and the complexity of the password reset process...,” speculating that “...resetting a password could introduce significant delays...”<sup>16</sup> I’ve already addressed the issue of reauthentication and password reset in my opening report; specifically, reauthentication is a reasonable and widely used security measure. The two paths of action found under Manage Subscription—Subscription Status, where customers can view their credit card information and/or update it, and Cancel Subscription, where customers can choose to cancel—are danger zones. Accidental editing via casual browsing of one or the other can lead to a cessation of services. Requiring reauthentication at this point is consistent with Nielsen’s heuristic of Error Prevention. Furthermore, an additional layer of security protecting the customer’s information is reasonable. Match.com witnesses have testified that the reason for the reauthentication page was to protect security, not to put up an arbitrary roadblock to cancelation.<sup>17</sup> Indeed, I have become aware that the FTC has brought cases over failure to adequately protect consumer data privacy.<sup>18</sup> A password reauthentication screen protects consumer privacy and is something I would expect the FTC to support, not object to.
35. Furthermore, entering a password is not burdensome. It is relatively simple for a subscriber to enter their password (either from memory or using a password manager), or even to reset their password if they have forgotten it. Dr. King offers no evidence to the contrary, other than speculating that “among less sophisticated users the process of resetting a password could introduce significant delays.” Yet Dr. King does nothing to define “less sophisticated users,” what portion of Match.com’s subscribers such users

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<sup>15</sup> Page 5

<sup>16</sup> Page 42

<sup>17</sup> Clinchy Dep. 28:19-29:6, 61:21-62:9; Ginsberg Dep. 206:10-207:8; Dubey Dep. 210:3-10.

<sup>18</sup> See, e.g., *In re Chegg, Inc.*, FTC File No. 2023151; *In re Drizly, LLC*, FTC File No. 2023185; *In re Residual Pumpkin Entity, LLC*, FTC File No. 1923209; <https://www.ftc.gov/news-events/topics/protecting-consumer-privacy-security/privacy-security-enforcement>.

“significant” delay is.

36. Dr. King then later suggests that the location of the reauthentication page is not arbitrary, but instead was *intentionally* placed in the flow to create an obstacle to cancelation. She states: “The arbitrary placement of a password authentication mechanism at this specific point, and not at other points on the website where sensitive information could be accessed and changed without the account holder’s knowledge, suggests that the password authentication was placed at this point as an obstacle for users to access the cancellation flow.”<sup>19</sup> Dr. King’s criticism that the placement was both arbitrary and also intentional shows that she is making inconsistent claims based on speculation and not actual evidence.

37. In any event, Dr. King cites no actual evidence that the reauthentication page was placed in the flow to obstruct cancelation attempts. The basis for Dr. King’s opinion appears to be (1) that a password is unnecessary to “access other account settings that posed a greater risk directly to the user if they were compromised, such as editing one’s name, email address, and password”; (2) speculation by a Match.com employee, based on inaccurate data, that “the majority of members drop out” at the reauthentication page; and (3) the fact that reauthentication in the cancelation flow is required only once per session. None of these bases support Dr. King’s conclusion.

38. First, Dr. King is wrong that there is anything inconsistent about when Match.com requires a password. To begin, Dr. King is factually incorrect when she states that a password is unnecessary to change a password. Setting a new password requires entering the subscriber’s current password first, as depicted below.

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<sup>19</sup> Page 37

## Manage account details

Update your password below:

Current Password

New Password

Confirm New Password

Make updates

Cancel

[Forgot my password](#)

*Figure 1 - Match.com New Password*

39. Match.com uses even greater security controls when a user wants to change an email address, as compared to cancel a subscription. Although Dr. King is correct that a password is not required, changing an email address more than 90 days after signing up requires contacting Customer Care, as depicted below. This is also true for changing other profile information, such as age. In other words, requiring password reauthentication in the cancelation flow is *less* burdensome and time-consuming than alternative ways in which Match.com protects other areas of the user's profile.

In order to help keep your account secure, you may be asked to do the following:

- Enter your current date of birth and password.
- Contact us if you signed up more than 90 days ago and want to update your email address or date of birth.

### Updating an Email Address

When updating your account information, remember that an email address can only be associated with one Match account. If your new email address is not being accepted, it may be linked to an account you created in the past.

Figure 2 - Match.com Help for changing birthdate or email


## Manage account details

Change your basic account information.


### Name

Brandon 

### Email

b\*\*\*\*\*d@precocityllc.com 

### Age

46 years old 

To update your age, [contact Customer Care](#).

### Password

\*\*\*\*\* 

Figure 3 - Match.com Edit Password

40. Although, indeed, a password isn't required to edit a subscriber's name, Dr. King does not explain how editing a name "pose[s] a greater risk directly to the user." There is little to no risk involved in editing a

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display name. A user may want to change their display name for any number of reasons (e.g., from their legal name to a nickname, such as “Joseph” to “Joe,” or to a new name to conform with chosen gender identity), so it makes sense that Match.com would not want to insert a security control there, whereas it would for a cancelation. For that reason, it is common for websites to allow changes to display names without requiring password entry. In my research, I couldn’t find a single example that required reauthentication to change a display name, including Google, LinkedIn, Venmo, Amazon, Slack, Microsoft, and more.

← Name

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Changes to your name will be reflected across your Google Account. [Learn more](#)


First name

River

Last name

Kang

**Who can see your name**

 Anyone can see this info when they communicate with you or view content you create in Google services. [Learn more](#)

Cancel

Save

Figure 4 - Google account name change

41. Next, Dr. King relies on Match.com employee communications in which one employee claimed that “the majority of members drop out when asked to re-enter their password.”<sup>20</sup> However, that data is misleading

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<sup>20</sup> Page 54

and inaccurate in numerous ways. First, those numbers are based on the number of sessions rather than the number of subscribers, so because a subscriber could have multiple sessions (e.g., a single subscriber that enters the flow five times would be counted five times in the session data), it does not accurately reflect how many subscribers actually “drop out” at each page. Second, it appears the Match.com employees were attempting to determine, *of the subscribers who did not resign in a particular session*, at what point in the flow did those subscribers “drop out.” That analysis excludes the vast majority of subscribers that successfully resigned. Third, it contained various users who could not have been attempting to cancel their subscriptions because they did not have a subscription (i.e., were free registrants), because free registrants see some of the same pages when deleting their accounts. Fourth, it also contained multiple non-U.S. users, which I understand are not relevant to this matter. Finally, another portion of users contained in that data had already resigned their subscriptions before entering the resignation flow, so they also cannot have been attempting to resign their subscriptions.<sup>21</sup>

42. The flaws in the data on which Dr. King relied are obvious in light of the more complete set of subscriber-level data produced in this litigation. We know that 13,900,434<sup>22</sup> of 15,200,226<sup>23</sup> subscribers that clicked “Manage Subscription” (91.45%) also clicked “Cancel Subscription” (i.e., were able to successfully enter their password and reach the Cancel Subscription page). That means, *at most*, no more than 8.55% of

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<sup>21</sup> Call with J. Talbott

<sup>22</sup> Sum of column C in MATCHFTC846468

<sup>23</sup> Sum of column C in MATCHFTC846469

“...the majority of users [dropping] out when asked to re-enter their password...”<sup>24</sup>

43. And even that data likely overstates the “dropout rate” because it is impossible to know for certain why users visited a particular page and whether they intended to cancel when they did so (or why they failed to cancel if they did not). For example, of the 8.55% of subscribers mentioned above who “dropped out” at the reauthorization screen, at least some of those subscribers likely intended to visit the “Subscription Status” page, rather than the cancelation flow, which is also accessible after entering a password. Except in the case of a situation like my usability study where the subscribers were told that their explicit goal was to cancel, it’s impossible to know why someone visited the reauthentication page. The first time we can know with any level of likelihood a person intends to cancel is when they click “Cancel Subscription” after the reauthentication page, and even then, they may just be exploring (for example, a user who does not intend to cancel, but wants to see if a save offer is presented).

44. Dr. King is correct that some studies have shown that requiring a password can lead to abandonment. However, the studies Dr. King cites regarding the friction of “sign-in or verification points”<sup>25</sup> all involve areas where the user does not have anything at stake, like online engagement, checkout, making

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<sup>24</sup> I understand both subscriber-level data and session-level data have been produced in this litigation. I rely on subscriber-level data for the Match.com statistics described in this report because the context of multiple sessions is unknowable and unlikely to have much impact on the question of simplicity or ease of use. In the case of the reauthorization page, it’s also unlikely the prompt was so confusing or burdensome that it forced a subscriber intending to cancel to “drop out” of the cancelation flow during one session but not another. Moreover, it’s important to note that even the session-level data does not support the claim that “the majority of users” drop out when asked to enter their password, as Dr. King claims. For example, from January 2013 through near the end of March 2023, 31,417,912 sessions reached the password page (i.e., clicked Manage Subscription). 57.58% of those sessions (18,088,887) reached the first survey page so they must have successfully entered a password and clicked Cancel Subscription. See MATCHFTC846518. Furthermore, 88.77% (16,056,670) of those sessions (those who clicked “Cancel Subscription”) resulted in a cancelation. See MATCHFTC846516. For the sessions that did not result in a cancelation, we can only guess the cause. The subscriber may have successfully entered a password but did not cancel for a variety of reasons, such as visiting the Subscription Status page rather than clicking “Cancel Subscription” to enter the cancelation flow, or they were simply exploring, or they were interrupted by something entirely unrelated to the design of the flow (such as someone at the door, the phone ringing, a baby crying, etc.).

<sup>25</sup> Page 52

purchases, etc.—precisely the opposite of what the customer is doing while canceling a Match.com

subscription—and are therefore irrelevant to this case. In those cases, if the user gets frustrated and abandons their effort, they keep their money. In this case, if the user abandons their effort, their subscription continues. The scenarios are polar opposites and likely result in different abandonment rates. In fact, we know the abandonment rate is lower for Match.com’s cancelation flow than in the studies that Dr. King cites, as evidenced by my usability study and Match.com’s data described in my opening report.

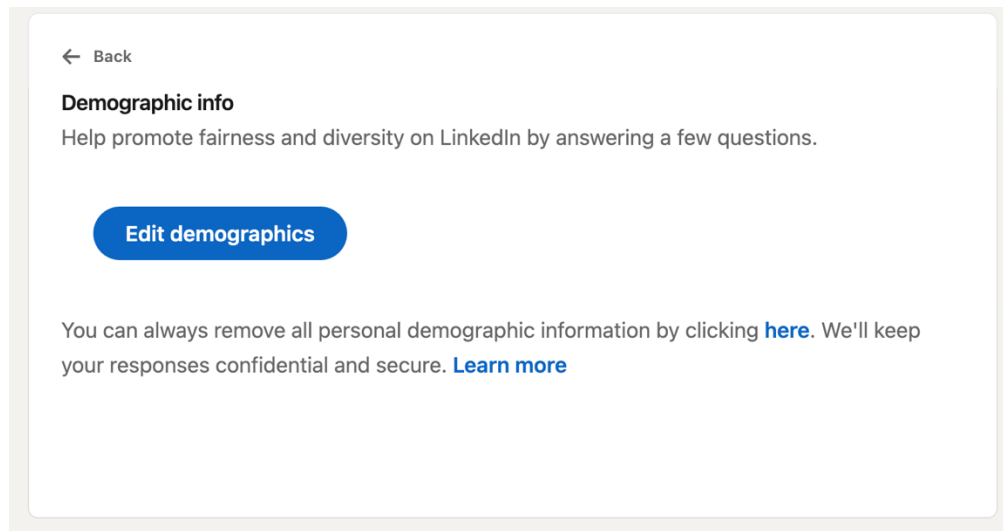
45. Finally, Dr. King claims that the fact that reauthentication is required only once per session somehow proves that reauthentication was not “a choice motivated by security concerns.” But the security concerns implicated by not requiring reauthentication *at all* and requiring reauthentication once per session are much different. By requiring reauthentication only once per session, Match.com is striking a balance between security and maximizing ease of access in light of security concerns. Attempting to strike that balance does not prove that there are no security concerns at all. Moreover, ironically, requiring reauthentication every time the user selects “Manage Subscription” would create *more* of the friction about which Dr. King complains.

### **Manage Subscription Page**

46. Dr. King criticizes the Manage Subscription page for “mixing of links and buttons.” However, it is quite common for websites to mix links and buttons (see Figure 5 below for an example), so doing so is unlikely to cause any confusion. The use of links and buttons on the Manage Subscription page is particularly unlikely to confuse. Nothing is distracting on the page, and there are clearly only three paths to choose from: Back (indicated by the solid state button); check subscription status (indicated by hyperlink); or cancel subscription (indicated by hyperlink). The hyperlinks are obviously clickable: they appear in blue text, and when a user hovers over them, the text is underlined, and the cursor turns into a hand. All three of the options are titular (i.e., they describe what happens if the user clicks them). Moreover, as explained

in my opening report, the design of this page is consistent with the Spotted Pattern of screen reading,

making it easy for a subscriber to identify quickly and easily what to click to take the action the subscriber desires.



*Figure 5 - LinkedIn.com Demographic edit section*

## Survey Questions

47. Dr. King next criticizes the inclusion of survey questions in the cancelation flow on a few bases, including that the survey violates the aesthetics heuristic, creates “obstruction,” causes “forced action,” and constitutes “hidden information” (because the questions are not expressly labeled as optional). I disagree with Dr. King’s opinions, as the survey questions in Match.com’s cancelation flow are standard best practices and do not cause the flow to be not easy or simple.
48. Although Dr. King claims that survey questions are “pepper[ed]” throughout the flow, there are only a few optional survey questions in a wizard format, meaning for clarity and improved usability, the questions are split across pages, with only one question appearing at a time. Dr. King objects that the survey

questions are “...spread over two disconnected pages...,”<sup>26</sup> suggesting it would be an improvement to put all questions on a single page. However, separating questions is a best practice among popular survey tools such as SurveyMonkey, Typeform, and Jotform. “Displaying one question at a time is the fastest and easiest way to conduct a survey. This method improves the user experience, which increases the likelihood that a respondent will continue until they reach the end of the survey.”<sup>27</sup> Dr. King’s inferred recommendation would actually increase friction and likely act against the customer’s best interest in this regard.

49. Dr. King also objects to the use of survey questions in the flow at all. But the survey questions are important because good user and customer experience design mean continuously gathering feedback to understand the real reasons why users do what they do, particularly for a business like Match.com where a user may be canceling because of a good experience (e.g., they found a match) or a bad experience (e.g., they disliked their potential matches). Improving the experience for current, new, and returning customers, in the case of cancelation, means understanding why users are leaving so the business knows how it is performing and what, if any, improvements need to be made, much like how a retailer may ask why a customer is returning an item. Surveys are an important part of improving retention and having data for usability experts to look at to improve changes elsewhere on the site. Companies like ProsperStack built their business around helping companies keep their users retained and happy. ProsperStack recommends (1) having users answer some survey questions to understand the why behind their cancelation (ProsperStack recommends fewer than six questions, which Match.com does), and (2)

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<sup>26</sup> Page 5

<sup>27</sup> <https://www.jotform.com/blog/one-at-a-time-question-on-survey-form/>

50. In fact, the Match.com cancelation survey is consistent with the very standards and articles that Dr. King cites. Dr. King argues that surveys should be optional, users should not be forced to fill out a survey to unsubscribe, and that they should be “very short, one-question surveys.”<sup>30</sup> Match.com’s flow fits this description. The survey questions are optional, a user need not answer them to unsubscribe, and the optional questions asked are very short, with one question asked at a time, across two pages, just as the authorities that Dr. King cites recommend. Although Dr. King claims that the optional questions waste user time and increase cognitive load, Dr. King never quantifies this speculation, nor does she have any data to support that speculation. The fact is that the questions are optional and can be skipped in under two seconds (and even if users choose to answer the questions, the time spent is minimal).

51. Although Dr. King acknowledges that the survey questions are optional, she criticizes the flow for not including an explicit indication that the questions are optional. She even suggests adding another question asking users if they would like to complete a survey.<sup>31</sup> However, as I point out in my opening report, there is no need for an explicit indication that the survey is optional because the UI signifies and indicates the user may continue at each step; nothing is ever disabled barring or preventing the user from skipping. Additional instructions that the single interaction point on the page (i.e., the radio buttons) is optional could add noise and distraction. Including more words (such as instructions that the survey is optional)

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<sup>28</sup> <https://prosperstack.com/blog/craft-effective-cancellation-flow/>

<sup>29</sup> Clinchy Dep. 62:10-63:9; Ginsberg Dep. 207:13-208:2.

<sup>30</sup> Page 39

<sup>31</sup> Pages 18, 44

“increas[es] [the user’s] cognitive load by having them commit it to their working memory. In other words, you’re making it harder for them to do their task.”<sup>32</sup>

52. Moreover, industry recommended best practice is to “...mark all the *required* fields.”<sup>32</sup> (emphasis added)

Marking optional fields as optional, by contrast, is “not obligatory.” Since no fields are required in the Match.com cancelation survey, no fields are marked, the next button is enabled (i.e., not greyed out), and users are free to skip everything if they choose.

53. Dr. King nevertheless claims that users might believe that the survey is required because the survey uses radio buttons, and “...radio buttons are typically presented as an element that must be filled out and selected before moving forward in the user flow.”<sup>33</sup> Dr. King offers no citation or evidence to support this dubious claim, nor could I find any support. There is nothing inherent about using radio buttons in forms, surveys, or questions that hints or suggests to users that they are required to answer. Rather, radio buttons are used to signify the user should select only a single option.

54. Dr. King next speculates that, because some of the survey responses generate a follow-up question, users *may* experience “dread” that *could* cause them to abandon cancelation. This opinion is not supported by evidence, or logic, particularly when abandoning the flow would cause the customer to continue paying for a service. Nor is it supported by actual evidence from my usability study and Match.com’s actual data, both of which show that nearly everyone that begins the flow completes it and they are not compelled to abandon it due to any “dread.” It is implausible that a few optional survey questions create such a sense of “dread” that users are willing to abandon the flow entirely and therefore continue paying for a subscription if they truly wanted to cancel.

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<sup>32</sup> <https://www.nngroup.com/articles/required-fields/>

<sup>33</sup> Page 42



55. Dr. King also takes issue with the optional open text response field that appeared in a previous version of the flow. She opines that the field “would also have posed a challenge for users,”<sup>34</sup> because some users could have interpreted the character count *maximum* as a word count *minimum*.<sup>34</sup> Dr. King offers no support for any of this speculation, nor am I aware of any such support. In any event, that field no longer exists in the current version of the flow.

56. Ultimately, Dr. King proposes an alternate design of presenting the optional survey questions after the cancelation confirmation. While the questions could be placed just about anywhere in the flow, having them where they currently are in the flow does not make the flow *not* simple, and this is supported by the data described in my opening report. Moreover, placing the questions before cancelation confirmation very likely results in higher response rates, which benefits users by allowing Match.com to assess whether improvements to its site are helpful or necessary based on user feedback.

#### **Retention/Save Offer Page**

57. Finally, Dr. King criticizes the retention/save offer page that is presented to a subset of users, primarily because this page is inconsistent with the other pages of the flow. I understand the FTC has admitted that including a save offer in a cancelation flow does not make the flow *not* simple,<sup>35</sup> so the inclusion of a save offer alone cannot be a basis for Dr. King’s opinions. Dr. King’s real complaint seems to be the design of the save offer page, not its inclusion in the flow. Dr. King complains that the retention page uses a “different stylesheet,” different language, and a different tone compared to other parts of the flow and that a previous version of the retention page mixed links with buttons.

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<sup>34</sup> Page 43

<sup>35</sup> FTC Second Am. Resp. to Request for Admission No. 33

58. Although the retention offer page does appear to be “...using a different stylesheet to render the

buttons...,”<sup>36</sup> I disagree with Dr. King’s speculation that “...users may have been confused...” by the different stylesheet. Dr. King cites no evidence from actual data or users that any subscriber has actually been confused by the use of a different “stylesheet,” much less that using a different stylesheet makes the flow not simple or easy.

59. The retention page’s use of slightly different language in some iterations (e.g., using “resign” rather than “cancel”) is unlikely to confuse users, particularly given the context. In fact, usability itself, as defined by the International Standards Organization (ISO) is “the extent to which the product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction *in a specified context of use*.”<sup>37</sup> While Dr. King looks at each feature or word choice myopically, an actual user would review the page in its larger context, considering its various elements. For example, Dr. King speculates that a user may not know what “resign” means. However, the context makes the meaning clear. The subscriber is given two options: accept the save offer (e.g., “Get 3 More Months”) or continue canceling (“No thanks, I want to resign”). There is nothing unclear about which option a subscriber should select if they want to cancel, even if a previous iteration of the retention page used the word “resign” rather than “cancel.” Similarly, even in the version of the retention page that replaced “No thanks, I want to resign” with “Continue” (which has since been replaced by “Continue Cancellation”), the context is clear. Dr. King suggests that the use of “Continue” “...creates confusion as to what task is being continued.”<sup>38</sup> But given the context of a strictly linear cancellation flow where the user has only two options (“Get 3 More Months” or “Continue”), there’s little room for ambiguity.

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<sup>36</sup> Page 36

<sup>37</sup> <https://www.semanticscholar.org/paper/Usability-Evaluation-Scholtz/8deccec5ace9235878e6aab06c3cd54f7b33a2ce> (emphasis added)

<sup>38</sup> Page 51

60. Additionally, any inconsistency in tone or language is likely to be irrelevant to users. As cited in my opening report as well as by Dr. King, studies show that “Users won't read your text thoroughly in a word-by-word manner. Exhaustive reading is rare...Yes, some people will read more, but most won't.”<sup>39</sup> Any subscribers interested in canceling likely will scan, click continue, and be done quickly (as indicated by the usability study results, which show an average completion time of only 74 seconds, and actual user data, which shows an average completion time of only 44 seconds), so the subscribers are unlikely to be reading closely enough to notice any language or tone inconsistencies, much less be confused by them.

61. The version of the retention page that mixed links with buttons also was unlikely to have confused users. As noted above, mixing links and buttons is not unusual, and all clickable items (whether buttons or links) were clearly indicated as clickable (e.g., by being rendered in blue text and underlined to indicate a hyperlink). The clickable items were labeled to indicate what each clickable item did (e.g., accept the save offer or continue cancelation).

62. Dr. King also accuses the retention page of using “confirmshaming” language, as follows: “[Username], sometimes finding love takes time. We truly believe you can find someone special on Match.com. After all, more relationships begin at Match.com than any other website. Give us another shot and we’ll give you \_\_\_\_ off your renewal.”<sup>40</sup> But she offers no explanation or evidence supporting her conclusion, and it is entirely unclear what standard Dr. King is using to evaluate whether something “shames” the user. In my expert opinion, I see no evidence of confirmshaming in this language, nor has Dr. King conducted any empirical analysis of users to evaluate their reaction to such language. Some better examples of confirmshaming are found on Dr. King’s dark patterns tip line, like on bestproducts.com, to opt out of their

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<sup>39</sup> <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content-discovered/>

<sup>40</sup> Page 50

notifications they give you two choices “Heck yea” or “Nope, I’m Rich.”<sup>41</sup> Another is from DuoLingo trying to get you to engage with its service, it shows a picture of a crying bird. The text reads “Language bird is crying. Learn Italian today or he will eat a poison [sic] loaf of bread.”<sup>42</sup> An example of confirmshaming language in this context for Match.com might be something like “Are you sure you want to stay single forever?” or “Fine. Stay home with your cats drinking boxed wine.” or “Don’t go! Quitters never win!” But Match.com’s language is considerate, polite, and hopeful, and presents facts and an incentive to stay. There is no guilt or shame in this language.

63. Dr. King also criticizes Match.com for presenting a couple’s success story in the retention offer, claiming that it “...is questionable as a user may be canceling their subscription for any number of reasons, including having established a ‘successful’ relationship.”<sup>43</sup> Ironically, that is exactly why the survey questions are valuable—so Match.com knows if presenting a save offer makes sense (such as if the subscriber is canceling for cost reasons), or not (such as if the subscriber is canceling because they met someone). There is nothing inappropriate or shameful about presenting a success story in an attempt to encourage subscribers to continue to try to find their own success on the site.

64. Overall, although the style of the retention page is somewhat different from other pages in the cancelation flow, that does not make the overall flow unusable, much less indicate that the flow is not easy or simple.

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<sup>41</sup> <https://darkpatternstipline.org/sightings/confirmshaming-tumblr-com/>

<sup>42</sup> <https://blog.mobiversal.com/dark-patterns-or-how-ux-exploits-the-user-confirmshaming.html>

<sup>43</sup> Page 50

65. In fact, actual Match.com analytics proves the point. Of the 13,900,434<sup>44</sup> subscribers that entered the cancelation flow from 2013 through 2022, 12,994,428 successfully resigned online,<sup>45</sup> and another 275,353 took a save offer.<sup>46</sup> This is a cancelation “success” and retention rate of 95.46%, meaning only 4.54% of subscribers did not cancel after entering the flow (either because they never intended to cancel, could not cancel, or chose not to cancel).<sup>47</sup> As described in my opening report, it is impossible to know what portion of these remaining 4.54% of subscribers intended to cancel but did not. Some may have been just exploring. Some may have been trying to trigger a save offer. Or some may have entered the flow with the intention to cancel but simply changed their mind. It is not uncommon for a subscriber to change their mind even after canceling. For example, Match.com data shows that from January 2013 through December 2022, 334,594 subscribers successfully canceled but then later reactivated their subscription before it expired and renewed for another term,<sup>48</sup> so it is reasonable to expect that some subscribers who entered the flow with the expectation of canceling may have changed their minds before completing the cancelation. In short, these statistics do not show any defect in the cancelation flow. To the contrary, they constitute a clear story of success from a usability perspective.

## II. Dr. King’s Version of a Nielsen Usability Heuristics Analysis Is Flawed

66. I disagree with the substance of Dr. King’s conclusions regarding usability heuristics and their application to Match.com’s online cancelation flow. Dr. King opines that Match.com violates three “principles of

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<sup>44</sup> Sum of column C in MATCHFTC846468

<sup>45</sup> Sum of column E in MATCHFTC846468. This does not account for subscribers who entered the online cancelation flow but resigned via an alternative method or whose subscriptions ultimately were not renewed for a different reason (e.g., billing failure).

<sup>46</sup> Sum of column G in MATCHFTC846468

<sup>47</sup> Even using session-level data rather than subscriber-level data, approximately 85% of sessions that hit the cancelation flow result in a cancelation within that session, not accounting for any save offer takers. See MATCHFTC846518 (sum of column F divided by sum of column D).

<sup>48</sup> MATCHFTC846512 (sum of column C)

website usability . . . in a manner that *could* lead to customer confusion” (although Dr. King cites no

evidence that these designs *have* led to customer confusion).<sup>49</sup> I disagree with Dr. King’s conclusions

regarding each of these usability principles, as described in more detail below.

**Visibility of System Status:** “The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.”<sup>50</sup>

67. Dr. King opines that Match.com violates this usability principle due to “a lack of consistent signaling to the user each step in the cancellation process and her present place within those steps.” In particular, Dr. King criticizes the “elimination of breadcrumbs” from the 2022 version of the cancelation flow and the “lack of labeling of steps.”

68. First, Dr. King’s emphasis on the use of breadcrumbs as a design pattern is misguided. To begin, what Dr. King apparently refers to as “breadcrumbs” are actually navigation, sub-navigation, and page titles. Dr. King correctly defines “breadcrumbs” as “a list of links representing the current page and its ‘ancestors’ (parent page, grandparent page, and so on), typically going all the way back to the site homepage.”<sup>51</sup> In other words, breadcrumbs identify the pages that a user may have visited (though not necessarily visited) to get to the current page.

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<sup>49</sup> Page 35 (emphasis added).

<sup>50</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

<sup>51</sup> Page 21 n.42 (quoting <https://www.nngroup.com/articles/breadcrumbs/>).

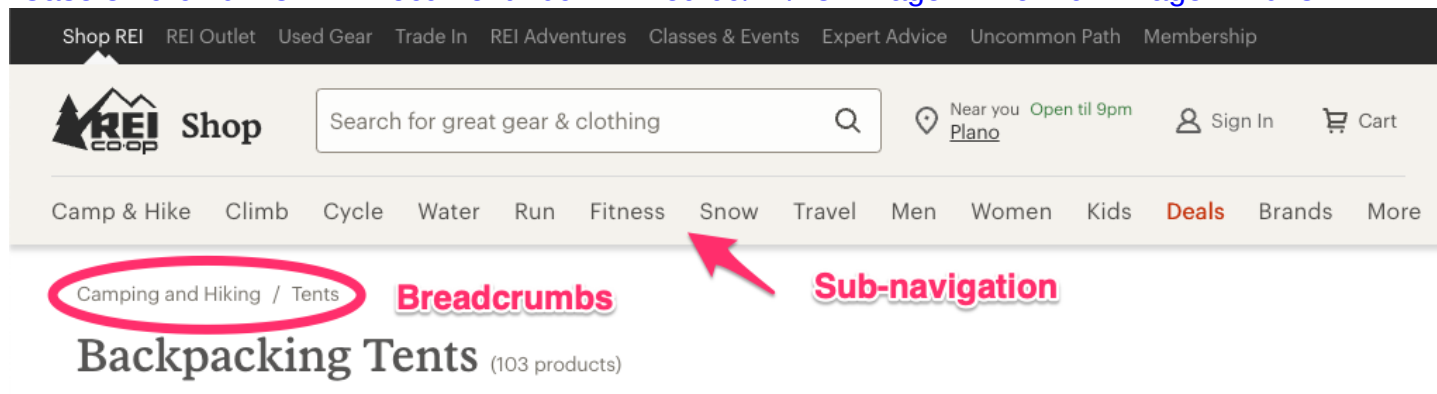


Figure 6 - REI.com

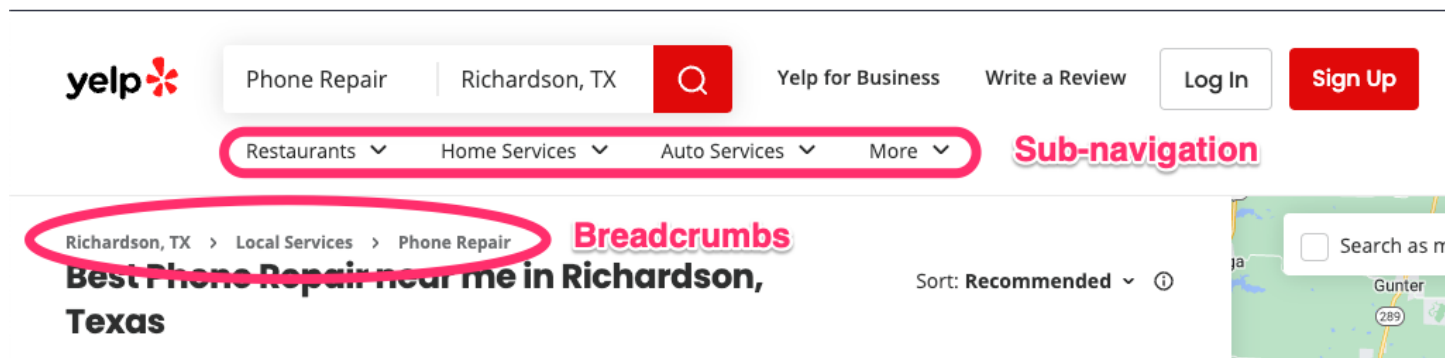


Figure 7 - Yelp.com

69. Navigation, sub-navigation, and page titles, by contrast, may indicate the user's current location and allow the user to navigate to other pages (though not necessarily the current page's "ancestors"). The examples above illustrate sub-navigation and how it differs from breadcrumbs.

70. Previous versions (see example below) of the Match.com cancelation flow used sub-navigation to indicate the user's location and allow them to navigate to other settings pages (supporting the usability heuristic of

“breadcrumbs.”<sup>52</sup> Thus, Match.com never “eliminated” breadcrumbs.

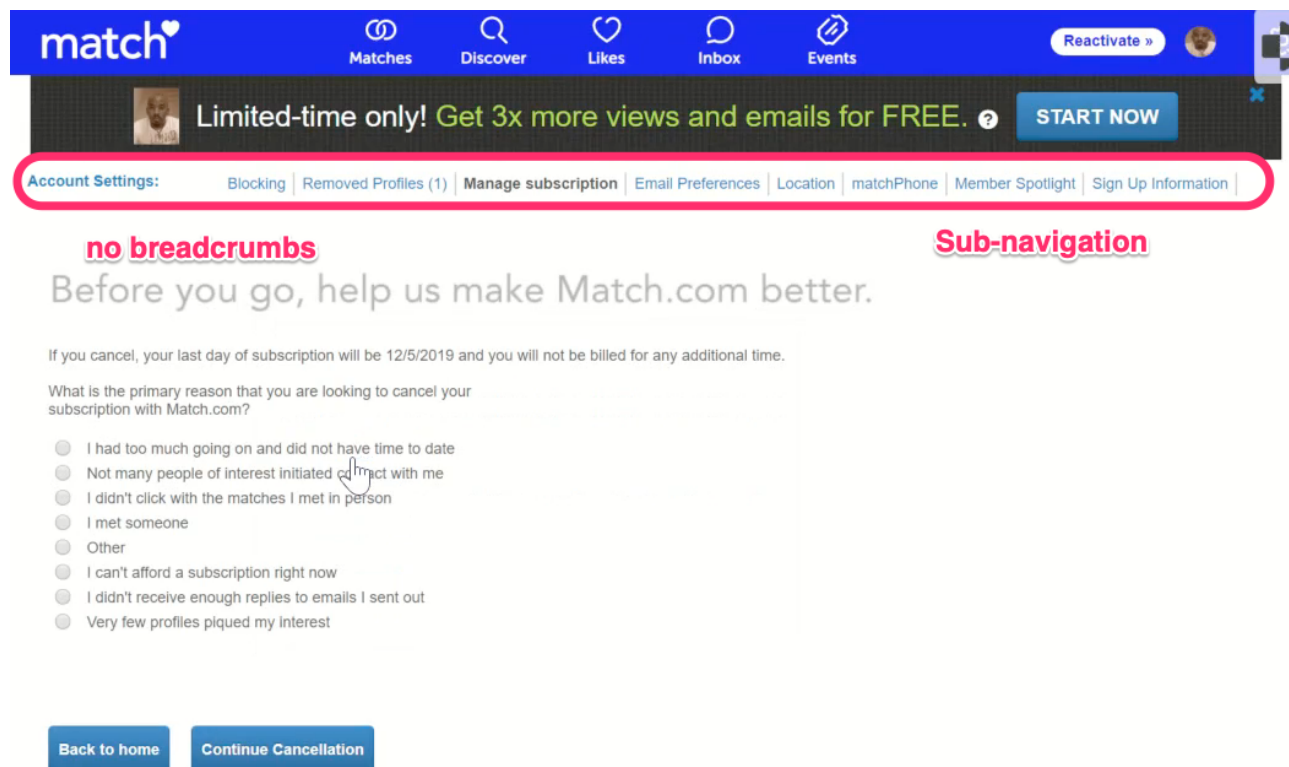


Figure 8 – Screenshot of MATCHFTC672297.mp4 including sub-navigation, but no breadcrumbs

71. In the 2022 version of the cancellation flow, the sub-navigation menu does not appear. However, the elimination of the sub-navigation menu did not impact usability. Each page of the flow continued to have a clear title or header (as described in my opening report), continuing to provide the user with a clear indication of their location, and included additional navigational buttons to return to the settings page (in addition to the ever-present settings gear that could return the user to the account settings page). Breadcrumbs and sub-navigation menus are primarily used to facilitate navigation, and their presence

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<sup>52</sup> The fact that Dr. King seems to have misidentified a sub-navigation menu as breadcrumbs calls into question her familiarity with the site and/or her expertise.



would not serve a purpose in the cancelation process. The only relevant information for someone who wants to cancel would be the page name, which is already prominently displayed. Moreover, the absence of breadcrumbs and sub-navigation menus throughout the rest of the Match.com experience would make it inconsistent and unnecessary to suddenly introduce them during the cancelation process.

72. Second, Dr. King states “All versions [of the flow] lack a simple, clear label (e.g., “Step 3 of 5,” “Page 4 of 6”) indicating to users precisely where they are in the process...”<sup>53</sup> However, Dr. King cites no support for her apparent claim that a flow must have numerical labels to be simple, particularly where (as here) the flow is not lengthy. Once a user has declared a possible intention to cancel (by clicking “Cancel Subscription”) there are only two steps: Optional Question 1 and Optional Question 2 (except in the case of users presented with a retention screen, in which case the step total is three).<sup>54</sup> After the optional survey questions, the user reaches the cancelation confirmation screen. The trick with labeling steps is to figure out when and where such design is warranted. Based on the cancelation flows I reviewed as indicated in my opening report,<sup>55</sup> labeling steps in a cancelation flow is rare.<sup>56</sup> As Jennifer Tidwell says in her book *Designing Interfaces*, “It’s silly to have a 2-step wizard, and a 15-step wizard is tedious.”<sup>57</sup>

73. What is more, a numerical step label is unnecessary given that there are three areas of information indicating system status on both optional question steps, including (1) the main title, (2) the text content, and (3) the button labels, as described in my opening report. In fact, Dr. King admits that the “Continue

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<sup>53</sup> Page 36

<sup>54</sup> Moreover, because the flow is not the same length for all users (as some see the retention screen and others do not), it would not make sense to number the pages because even Match.com does not know how many pages a subscriber will see when the subscriber first enters the flow. If anything, numbering the pages in light of this uncertainty would be more likely to confuse users than provide clarity. For example, stating “Page 1 of 2” could confuse users who are shown a retention offer (and therefore see three pages), whereas stating “Page 1 of 3” could confuse users who are not shown that offer (and therefore see two pages).

<sup>55</sup> See Expert Report of Brandon Ward at 31 and App’x I.

<sup>56</sup> Only the *New York Times*’s cancelation flow numbered steps (of which there were four). Amazon’s flow has what appears to be a progress bar, but not a numerical indicator.

<sup>57</sup> <https://faculty.washington.edu/farkas/HUDE%20407-2013/Tidwell-DesignPatternOnWizards.pdf>

Cancellation” button (which appears on all pages of the flow in the current version) is a “signal” to the user regarding their location in the flow. The fact that additional labeling *could* be added doesn’t mean there isn’t sufficient labeling as-is and doesn’t indicate that the Match.com cancelation flow violates the visibility of system status heuristic, as Dr. King contends.

**Consistency and Standards:** “Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform and industry conventions.”<sup>58</sup>

74. Dr. King claims that Match.com’s cancelation flow violates the consistency and standards heuristic in three primary ways—(1) the retention offer page using a different stylesheet; (2) the “mixing of links and buttons” on some pages; and (3) password authentication—thus rendering the cancelation flow not easy or simple. I disagree with Dr. King’s conclusion.

75. First, although the retention offer page does appear to be “...using a different stylesheet to render the buttons...,”<sup>59</sup> I disagree with Dr. King’s speculation that “...users may have been confused...” by the different stylesheet, as described above. Dr. King cites no evidence from actual data or users. In any event, the consistency heuristic is primarily functionally focused, not aesthetically, meaning any inconsistency in the CSS or look and feel, is unlikely to actually cause consumer confusion (and Dr. King has no actual evidence to the contrary).

76. Second, the “mixing of links and buttons” does not violate the consistency and standards heuristic. As noted above, this is common and unlikely to cause confusion.

77. Finally, Dr. King claims that “[t]he arbitrary placement of a password authentication mechanism” in the cancelation flow “suggests that the password authentication was placed at this point as an obstacle for

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<sup>58</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

<sup>59</sup> Page 36

users to access the cancellation flow.” That theory is pure speculation, without any citation to any

evidence suggesting that the password authentication mechanism is intended to be a roadblock.

Moreover, requiring users to reauthenticate before accessing private information has nothing to do with ensuring that users do “not have to wonder whether different words, situations, or actions mean the same thing”—the definition of the consistency heuristic. Thus, the existence of the password authentication mechanism has no bearing on this heuristic.

78. Overall, the flow as a whole has a consistent design. Once subscribers choose “Cancel Subscription” the flow is consistent and clear: Keep clicking continue until you see the confirmation screen. For most people, this means clicking the “Continue Cancellation” button twice. For some, it also includes the retention screen. With the exception of previous versions of the retention screen, the buttons are always in the exact same order, the exact same style, and the exact same location relative to the content. Additionally, engaging with any of the content is consistently optional and customers can just click continue. And while the retention screen may not be completely consistent with the other pages in the flow, the retention screen doesn’t violate standard web design principles in general, as described above.
79. Ultimately, Dr. King’s conclusions regarding the consistency heuristic and its alleged impact on the usability of Match.com’s cancelation flow are all speculative, non-specific, and unsupported by any evidence. Data from Match.com analytics, by contrast, indicates this heuristic was not violated given that 95.46% of users were able to either cancel or successfully take a save offer.

**Aesthetic and Minimalist Design:** “Interfaces should not contain information that is irrelevant or rarely needed. Every extra unit of information in an interface competes with the relevant units of information and diminishes their relative visibility.”<sup>60</sup>

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<sup>60</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

80. Dr. King argues the cancelation process violates this heuristic by “inserting extraneous, unnecessary steps, making it far longer than necessary and subjecting its users to excess interactions that increase their cognitive load...”<sup>61</sup> In particular, Dr. King criticizes the two (optional) survey questions and the retention offer presented to a subset of subscribers.

81. Dr. King has misunderstood and misused this heuristic. The heuristic is about aesthetic design principles, i.e., the look, the feel, or the content of a screen. “...it's about making sure you're keeping the content and visual design focused on the essentials. Ensure that the visual elements of the interface support the user's primary goals.”<sup>60</sup> This heuristic has nothing to do with length or cognitive load. I’ve addressed in my opening report how Match.com’s cancelation flow satisfies this heuristic (as properly interpreted) in many ways. While aesthetic preferences are highly subjective, from a user experience point of view the Match.com cancelation flow is relatively clean and simple, only including information and controls that subscribers require to make informed choices, as explained in my opening report.

82. Even assuming that length and cognitive load were relevant to this heuristic, I disagree with Dr. King’s conclusions. Dr. King calls the process “lengthy,” but it is unclear how she defines “lengthy.” As described in my opening report, the cancelation flow is not, in fact, “lengthy” by any objective measure.

- i. The average time it took usability study participants to cancel, starting from the login screen to completion, was 74 seconds.
- ii. Based on usability study data, participants were on average able to cancel in 83.7% less time than it took to create an account and subscribe.

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<sup>61</sup> Page 38

- iii. Actual Match.com subscriber data shows that it takes on average 44 seconds to complete the cancelation flow—four times faster than the time it takes users to merely subscribe (i.e., enter payment information, not including the time it takes to create an account).
- iv. As explained in my opening report, many other sites require at least 5 steps to cancel (steps, not clicks; actual clicks are higher), meaning Match.com’s flow is consistent and unremarkable (not “lengthy”) among its peers in this category.<sup>62</sup>
- v. At least four independent studies from reputable sources have concluded “...the number of necessary clicks affects neither user satisfaction, nor success rate...fewer clicks don’t make users happier and aren’t necessarily perceived as faster. What really counts here is ease of navigation, the constant scent of information along the user’s path. If you don’t make the user think about the clicks, they won’t mind having a few extra clicks.”<sup>63</sup> The length of a process is largely irrelevant provided the steps in that process are clear and concise. Breaking the survey into two questions for instance helps reduce cognitive load on the user, making it easier and faster for them to respond or skip than if everything was all presented on a single page at the same time. Shorter does not mean simpler.

83. Even if Match.com were to shorten the flow, it is unlikely that shortening an already-short process would have any significant effect on the flow’s usability. The fact that a flow theoretically *can* be made shorter does not mean that the existing version is not easy or simple. Dr. King does not explain why she apparently believes otherwise. Rather, Dr. King seems to be trying to determine how to make the

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<sup>62</sup> See Expert Report of Brandon Ward at 31.

<sup>63</sup> <https://uxmyths.com/post/654026581/myth-all-pages-should-be-accessible-in-3-clicks>

cancelation flow “simplest,” and not trying to determine what would be sufficient to make it merely

“simple.”

84. Dr. King does not even address the seven other Nielsen factors, presumably because they are clearly met.

The fact it is undisputed Match.com’s cancelation flow meets the majority of the Nielsen factors even in Dr. King’s estimation shows the cancelation process is simple (even if Dr. King were right about the other three factors, which she is not).

### III. Dr. King’s “Dark Patterns” Analysis Is Flawed

85. In addition to some of the Nielsen usability heuristics, Dr. King claims to have analyzed several “dark patterns” she allegedly found in Match.com’s online cancelation flow. Although I agree with Dr. King that “dark patterns”—meaning “user interfaces whose designers knowingly confuse users, make it difficult for users to express their actual preferences, or manipulate users into taking certain actions”<sup>64</sup>—are undesirable, I did not find any evidence of deceptive, manipulative, tricky, coercive, etc. practices in the Match.com cancelation flow that would make the cancelation flow not simple, nor prevent subscribers from confidently canceling their subscription. I address the specific alleged dark patterns discussed in Dr. King’s report below.

**Obstruction:** “Making a process more difficult than it needs to be, with the intent of dissuading certain action(s)”<sup>65</sup>

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<sup>64</sup> [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3431205](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3431205)

<sup>65</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

86. Dr. King concludes “Obstruction was used throughout the entire cancellation process...,”<sup>66</sup> pointing specifically to password reauthentication, the two optional survey questions, and “inconsistent design.” Dr. King’s conclusions regarding obstruction are not valid.

87. First, Dr. King appears to assume that an “obstruction” dark pattern exists any time “a process [is] more difficult than it needs to be.” If that were correct, however, then any design other than *the absolute simplest and most straightforward* design would be a dark pattern. By that definition, nearly every website would be using an obstruction dark pattern. That cannot be so since there are multiple ways to create a simple and usable website. Instead, an obstruction dark pattern exists only if the obstruction is inserted “with the intent of dissuading certain action(s).” Yet Dr. King points to no evidence (other than her own speculation) that the *intent* of the password reauthentication page, the survey questions, or the design choices were to dissuade cancelation. Moreover, Dr. King entirely ignores that “[o]bstruction often manifests as a *major* barrier to a particular task that the user may want to accomplish.”<sup>67</sup> None of the alleged “obstructions” that Dr. King identified are a major barrier, nor does Dr. King cite any evidence that they are. Each of the alleged obstructions can be overcome within seconds and is clearly labeled.

88. Second, Dr. King incorrectly suggests that Match.com uses a form of obstruction called the “Roach Motel” where “...the design makes it very easy for you to get into a certain situation, but then makes it hard for you to get out of it (e.g., a subscription).”<sup>68</sup> To begin, it is unclear how Dr. King reaches this conclusion because neither the text of Dr. King’s report itself nor the sources cited in it suggest that she has ever so much as viewed screenshots or videos of Match.com’s registration or subscription flow, much less experienced it herself. By contrast, I personally experienced the registration and subscription flow many

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<sup>66</sup> Page 40

<sup>67</sup> <https://darkpatterns.uxp2.com/patterns-2/obstruction/> (emphasis added)

<sup>68</sup> Page 17

times, as did the usability study participants. The facts and data show Match.com is the opposite of a

Roach Motel. Namely, my usability study showed that study participants took a median of 453 seconds to subscribe (i.e., create an account and choose a subscription), whereas it took a median of only 74 seconds to cancel. Actual user data available from Match.com confirms that to be true; completing only the Match.com subscription purchase process (i.e., excluding registration time) takes, on average, 175 seconds to purchase a subscription, whereas it took actual users an average of 44 seconds to cancel. Moreover, the account creation process and subscription process each involve far more steps and choices than the cancelation flow. Setting up a profile involves eleven required steps and twenty-nine additional optional steps. Then the subscription process involves eleven optional steps and seven different payment plans to choose from, all of which offer various payment options. Thus, it is objectively harder to subscribe than to cancel, as shown by the usability study and actual user data. In no way can Match.com be considered a “Roach Motel.”

89. In fact, the example of a “Roach Motel” that Dr. King offers reveals the flaw in her logic as applied to Match.com. The livenation.com example—with obscured and inverted controls tricking the user into accidentally subscribing to Rolling Stone magazine, then requiring the user to physically mail a form within a restricted timeframe if they want to cancel—is a classic dark pattern. Match.com’s cancelation flow does none of that. As evidenced above and in my opening report, Match.com’s flow is literally the opposite, where subscribing requires considerably more effort than canceling. Dr. King would have known this if she had seen or experienced the Match.com subscription process.

90. Third, examining the examples of “obstruction” that Dr. King points to reveals that they are not actually obstructions at all. I addressed in my opening report and above the purpose that reauthentication and the survey questions serve—i.e., protecting security and providing valuable business information that is used to improve user experience.



91. Regardless, these elements don't prevent people from canceling and don't make the process not simple.

Data from my usability study and Match.com's own user data demonstrate that these steps add little to no friction to the process, and the (minimal) time required and success rates support this conclusion.

**Forced Action:** A design pattern "...requiring the user to perform a certain action to access (or continue to access) certain functionality."<sup>69</sup> Note this isn't necessarily a nefarious dark pattern in and of itself. A good example of forced action is a locked car. You are forced to present a matching key and unlock it before entering and then again to start and drive the vehicle.

92. Dr. King asserts reauthentication and the optional surveys are negative forced actions claiming "...there is weak, or zero, justification for the user to take the action; the point is to make the action egregious or laborious enough to disincentivize the user to complete their task."<sup>70</sup> As stated in my opening report and above, the argument is unsupported and not applicable here. There is nothing "egregious or laborious" about entering a password or asking optional survey questions, both of which have legitimate business purposes.

93. The definitive refutation of any dark pattern here is the results of the usability study, in which study participants overwhelmingly stated cancelation is simple, and even simpler than subscribing. The participants' cancelation success rate also supports that conclusion, as does Match.com's own data, showing that nearly all subscribers that click "Cancel Subscription" successfully cancel. This data shows that neither the password reauthentication page nor the optional surveys are "egregious or laborious enough to disincentivize the user to complete" the cancelation flow. It simply means the flow is secure and thorough.

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<sup>69</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

<sup>70</sup> Page 42

**Hidden Information:** “options or actions relevant to the user but not made immediately or readily

accessible.”<sup>71</sup>

94. Dr. King states “Match.com frequently hides or fails to disclose relevant information to users...I observed

at least two examples of hidden information...”<sup>72</sup> The two examples Dr. King states are the optional

surveys not being explicitly labeled as optional, and the findability of the cancelation process itself.<sup>73</sup>

95. I’ve already addressed the discoverability of the optional survey questions above. In short, there is

nothing “hidden” about the survey questions being optional, nor does Match.com “[r]epresent[] the

optional surveys are required,” as Dr. King claims. The fact that the optionality could be *more* obvious

(such as using a “Skip” text button) does not make the current information “hidden.” Further, even if the

survey questions were mandatory, they would still be simple.

96. Dr. King then speculates that some of the language in the cancelation flow, such as “Before you go, help us

make Match.com better” or “Tell us more,” may have led “some users to believe the survey is compulsory

or necessary for cancellation.”<sup>74</sup> Yet she never explains how or why that language might suggest a

requirement, nor does she support her speculation with any empirical data. If anything, as explained in my

opening report, the language is clear, particularly in the larger design context.

97. Regarding the findability of the cancelation process itself, that issue is addressed in my opening report.

Here, I will address specific elements of Dr. King’s report. I disagree with Dr. King that “...finding the

means to cancel on the website was not a simple task.”<sup>74</sup> The information architecture (“IA”) of the

location of the cancelation flow is clear and representative of standard practices across the web and other

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<sup>71</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

<sup>72</sup> Page 18

<sup>73</sup> It is unclear how Dr. King concludes only two examples are “frequent.”

<sup>74</sup> Page 44

large websites. Additionally, I (unlike Dr. King) actually used the website rather than being shown videos or screenshots, so it is unclear how Dr. King can opine on the findability of the cancellation flow when she apparently has never attempted to do so herself. Dr. King claims, for example, that finding the flow under Settings “...required exploration by users to encounter the Account Settings option”<sup>74</sup> but again offers no supporting evidence of this claim. She did not identify any users or what “exploration” they were “required” to do.

98. Dr. King’s description of how to find the cancellation flow is also factually inaccurate. Dr. King begins by stating she is only aware of “...a single pathway to start the process...”<sup>74</sup> (though she later admits that the process is available under Help as well, as the “...help page also directs the user to the online process...”<sup>75</sup>). She then incorrectly claims that the Help pages “buried information” about cancellation, ignoring that subscribers can use the Help page search box to search at least *a dozen* different cancellation-related terms that will take the subscriber to the cancellation help page that leads subscribers **directly** to the flow, as described in my opening report.

99. Dr. King then claims that having “a single pathway” to start the process means that “failure rates could be high *if* users did not discover it.” To begin, Dr. King is incorrect that there is only a “single pathway” to start the process; as described above and in my opening report, subscribers can reach the cancellation flow in a variety of different ways. Additionally, with few exceptions, it’s common to only have one path to accomplish a task on the web and in software. There may be multiple paths to begin executing a task (e.g., a button, a menu option, a key command, etc.), but only a single way to do that task (e.g., all three options launch the same, singular flow). This is basic software design. As documented in my opening report, I located two direct paths to cancellation (direct, and via Help), while within Help, in addition to clicking to

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<sup>75</sup> Page 45

the correct article, I found at least twelve additional paths to get to the Help article via searches, totaling at least *fourteen* separate pathways customers could potentially take to get to the Manage Subscription screen to begin canceling. There is nothing “hidden” about the cancelation flow.

100. Dr. King concludes “The discoverability of the cancellation process is buried under indirect settings...”<sup>76</sup> and she states “...the use of the term “settings” in the drop-down menu is ambiguous...”<sup>77</sup> hinting this “ambiguity” leads to difficulty finding the flow. There is no evidence the flow is buried anywhere, nor that getting there requires some complex “indirect” navigation. Of the ten other services I reviewed 100% of them began the path to cancelation in the same place as Match.com: Account/Settings. Of the two other services Dr. King reviewed (Coffee Meets Bagel, and Facebook Dating (which does not offer subscriptions)), 100% of those too began the path to cancelation on the Account/Settings page.<sup>78</sup> In fact, in Dr. King’s own suggested redesign, she also places the cancelation flow in the Account/Settings page.<sup>79</sup> Clearly, this is the best practice, and not ambiguous, buried, or indirect at all.

101. Dr. King continues “...on the Account Settings page, there is no mention of cancellation...”<sup>77</sup> Upon review of the available options, it’s clear there is only one logical place a customer could go to cancel, and the data in my opening report confirms this. It’s worth noting that in some versions of the site before the 2022 version (see MATCHFTC761906.mp4), the word cancel was included in the label, but it’s doubtful the removal of that word had much if any effect on the success rate of cancelations, as the success rate after removing it continues to be very high (91.5% in my study, and even higher in Match.com data).

102. Moreover, Dr. King’s speculation about whether subscribers *might* have found it difficult to find the cancelation flow for any of the various reasons she lists is not only unsupported but is also

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<sup>76</sup> Page 4

<sup>77</sup> Page 44

<sup>78</sup> Page 64

<sup>79</sup> Page 58

**98.78% of participants (162 of 164) were able to locate the Manage Subscription page** and continue with their cancelation process, disproving Dr. King's hypothesis that subscribers intending to cancel had difficulty finding the flow.

**Content Strategy:** "Content strategy and copywriting refer to the actual language and word choices within a software application (app) or product."<sup>80</sup>

103. Dr. King claims that Match.com's "content strategy and copywriting...contributed to user confusion within the cancellation flow."<sup>81</sup> But Dr. King again offers no data to support that assertion. Without evidence, this is mere conjecture. Moreover, as discussed in more detail below, the specific items that Dr. King identifies as inconsistent or confusing are not.

104. **Inconsistent Language:** First, Dr. King asserts that "...Match.com used inconsistent language throughout the cancellation process..."<sup>82</sup> The only "inconsistencies" she identifies, however, are on a single page of the flow (the retention offer page, which only a subset of subscribers see), not "throughout" the flow. Moreover, Dr. King never explains how "switching from third person to first person," for example, would make a subscriber confused about whether they had successfully completed cancelation. As described above, "inconsistent language" on a single page is unlikely to cause any confusion, particularly in context. The fact that Dr. King might have chosen different words or phrases does not mean that the current version is not simple, nor is there any evidence to support that assumption. Inconsistency in language or content does not equate to something being difficult to find or do, and Dr. King's report does

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<sup>80</sup> <https://www.nngroup.com/articles/ten-usability-heuristics/>

<sup>81</sup> Page 45

<sup>82</sup> Page 46

not show otherwise. The data, by contrast, indicates that the flow is both easy and simple to find and complete, as evidenced by the high success rate in my usability study (91.4%) and from Match.com's data.

105. **Confirmshaming:** "...the act of guiltting the user into opting in to [sic] something. The option to decline is worded in such a way as to shame the user into compliance."<sup>83</sup> and "...using language and emotion (shame) to steer users away from making a certain choice."<sup>84</sup>
106. Dr. King concludes the retention offer used confirmshaming with its language and presenting a couple's success story. As described above, I disagree that there is anything "shaming" about the retention page.
107. **Confusing Terminology:** Dr. King next states that Match.com uses confusing terminology.
108. First, she claims that the retention page's past use of "resignation" (rather than cancelation) or a "Continue" button (rather than "Continue Cancellation" button) created confusion. However, she fails to identify any actual users or evidence to support these claims. As described above, this language is clear in context. In any event, the "resign" link on the retention page was changed to a "Continue" button in 2018, and the "Continue" button was changed to a "Continue Cancellation" button in 2019. So to the extent "resign" or "Continue" was confusing (they were not), that confusion has been eliminated.
109. Dr. King next claims that the "Before you go" headline may have "misled some users to believe that this was the final step in the cancellation process." As explained in my opening report, I disagree. The headline on its own is clear that the subscriber has not yet completed cancelation (because the subscriber has not yet "gone"), a conclusion that is reinforced by other language on that page, as elaborated on in my

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<sup>83</sup> Page 48

<sup>84</sup> Page 49

which shows nearly all subscribers advanced past this page and successfully canceled.

## VII. RESPONSE TO DR. KING'S PROPOSED ALTERNATIVE DESIGN

110. Dr. King concludes her report by putting her heuristic analysis into "perspective" based on "company documents" and "competitor practices," and then proposing an alternative design. There are two problems with this. First, her proposed alternative design is not simpler or better than Match.com's existing flow. Second, even if it were, that would mean nothing. Every website or process could theoretically be simpler. But that does not mean the existing process is not already simple.
111. First, Dr. King cites a handful of documents in which Match.com employees proposed re-designs of the cancelation flow or suggested critiques of the flow based on alleged consumer complaints. Dr. King claims that the "existence of customer complaints" supports her opinion that Match.com's flow is not simple. The fact that complaints exist, however, is not proof that a site is not usable. It is impossible to design a site that satisfies every user.<sup>85</sup> Dr. King does no empirical analysis to show that a significant percentage of customers actually complained about the cancelation flow, and certainly, none showing that a meaningful number complained that it was not simple. Additionally, Dr. King is misconstruing some of those company documents. For example, one witness testified that when she referred to "complaints," she meant "an internal word for members calling," not necessarily complaining about the cancelation flow being not simple.<sup>86</sup>

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<sup>85</sup> <https://www.linkedin.com/pulse/idea-you-can-design-everyone-myth-rekha-bhavsar/>

<sup>86</sup> Clinchy Dep. 75:4-19; see also Auderer Dep. 240:1-5.

112. Moreover, Dr. King apparently did not review any actual customer complaints to understand what

exactly the customers were complaining about—as none are in the data cited in her report. Instead, she appears to have relied on unverified second or third-hand mentions of some number of customer complaints by former Match.com employees. Even those employees admit to not having enough data to substantiate their assumptions stating “...I can dig up some data if needed.”<sup>87</sup> Furthermore, in reality, complaints about the online cancelation flow are a small minority of Match.com’s customer care contacts, according to a former Vice President of Customer Support at Match.com.<sup>88</sup>

113. What is more, good UX design does not rely on anecdotes from customer complaints; it relies on data. And the actual data in this case—both from Match.com’s actual user data and my usability study—demonstrates that the vast majority of subscribers can successfully cancel their subscriptions via the online flow, regardless of what some former Match.com employees may have speculated.

114. Dr. King next compares Match.com’s online cancelation flow to “competitor practices,” but the other sites on which Dr. King relies are not comparable. Dr. King does not explain how she chose the “competitors” to which to compare Match.com’s online cancelation flow. As explained in my opening report, I examined numerous other subscription sites and came to a different conclusion, as I found that the elements of Match.com’s cancelation flow are common across other sites. The fact that Dr. King found two examples of other (non-comparable) sites that do not have all the same elements as Match.com’s cancelation flow does not prove that Match.com’s flow is not simple.

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<sup>87</sup> MATCHFTC320168

<sup>88</sup> See Watson Dep. 156:2-7 (explaining that “I thought I cancelled” contacts were on average 50-60 people per month, “which is 1 percent maybe of the volume that we would receive on a monthly basis”); 195:4-8 (“Q. Would you agree that generally speaking, Match in general during this time period received a lot of complaints from members who stated they cancelled on the site and it didn’t work? A. No.”).



115. What is more, the “competitors” that Dr. King chose are not comparable to Match.com in varying ways, making Dr. King’s comparison unhelpful.

116. **Facebook Dating** is a completely free service, meaning there is no paid “subscription” to cancel, and it is available only via an app (not on a desktop computer or mobile web). Because Facebook Dating is entirely free,<sup>89</sup> what Dr. King appears to be describing is deleting an entire account, rather than ending a paid subscription. It makes sense that a flow to cancel a paid subscription is different from a flow to delete a free account (e.g., because the latter doesn’t have financial implications). For example, it is not surprising that Facebook Dating’s flow does not include a save offer (i.e., offering a discounted subscription), because the service is already free so there is nothing to discount. Moreover, Facebook Dating is a minor part of Facebook’s overall service, meaning collecting feedback from users about why they are deleting their dating accounts is less important because it affects a much smaller subset of Facebook’s overall users and business (as deleting a Facebook Dating account does not delete the user’s entire Facebook account). The very purpose of Match.com, by contrast, is to help users find a match, so it is far more important for Match.com to know whether its subscribers are satisfied and therefore whether it needs to make adjustments to improve the experience for its remaining subscribers.

117. **CoffeeMeetsBagel** is also not comparable to Match.com. Like Facebook Dating, CoffeeMeetsBagel also is available only on an app (not on a desktop computer or mobile web). Importantly, that means that all billing and subscription cancelations are managed through the Apple App Store or Google Play, depending on the user’s device.<sup>90</sup> Again, what Dr. King appears to be describing in her report is deleting

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<sup>89</sup> Rather than selling subscriptions, Facebook makes much of its revenue through targeted advertising, which has led to consumer privacy issues resulting in FTC action and a \$5 billion penalty. <https://www.ftc.gov/news-events/news/press-releases/2019/07/ftc-imposes-5-billion-penalty-sweeping-new-privacy-restrictions-facebook>. It strikes me as odd that Dr. King relies on such a company as a good example, its irrelevance notwithstanding.

<sup>90</sup> <https://coffeemeetsbagel.zendesk.com/hc/en-us/articles/1500002587001-How-do-I-turn-off-auto-renewal-or-cancel-my-subscription->

a user's free *account*, not canceling a paid subscription. As noted above, there are good reasons for those flows to be different and also explains why the "delete account" flow does not contain a save offer (because there is no discount to offer on an already-free account).

118. Even the comparison itself is not comparable. Throughout her report, Dr. King describes and opines about the *desktop* version of Match.com's cancelation flow (i.e., the version a user would see if they used a laptop or desktop computer to visit Match.com). Yet Dr. King admits in a footnote that the "competitor flow" reviews "...were conducted on the mobile versions of these services."<sup>91</sup> Usability considerations can be very different in the desktop versus mobile context, so comparing flows across services in those two different contexts makes little sense. "When you test a mobile product with users, you need to examine that product in the right context because the mobile environment isn't the same as the traditional desktop environment."<sup>92</sup> Moreover, it is unclear whether Dr. King experienced these "competitor flows" herself or is relying on screenshots and videos taken by others, as she is with the Match.com flow. If the former, it is unfair to compare actual experience to screenshots and videos (and begs the question why Dr. King was willing to experience the "competitor flows" herself, but not Match.com's flow). If the latter, her heuristic analysis of the "competitor flows" suffers from the same deficiencies as her analysis of the Match.com flow.

119. Moreover, putting aside the lack of comparability, Dr. King identifies "friction" even in these "competitor" flows, but it is unclear what point Dr. King is trying to make. If the point is that the "competitor" flows are "easy" and "simple" to use and find (unlike Match.com's, according to Dr. King), then even "easy" and "simple" flows have friction, according to Dr. King's characterizations. But Dr. King never explains what standard she is using to determine at what point a flow crosses the line from "easy"

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<sup>91</sup> Page 62, footnote 99

<sup>92</sup> <https://www.interaction-design.org/literature/article/mobile-usability-research-the-important-differences-from-the-desktop>

and “simple” to not. For example, how much friction is too much? Dr. King never says. If the point is that the competitor flows *also* are not easy or simple because they also use friction, however, then it is unclear what value there is in comparing Match.com to those sites (or whether **any** flow other than the easiest or simplest would ever meet Dr. King’s exacting standards).

120. In any event, the fact that shorter flows exist on other (non-comparable) sites, or that other flows have fewer alleged friction points or dark patterns, does not mean that Match.com’s cancellation flow is not easy or simple. There are many ways for a flow to be easy or simple, without the flow being the easiest or the simplest. Thus, Dr. King’s comparison to competitor flows is not helpful in determining whether Match.com’s flow is easy or simple, other than acknowledging that these alleged “frictions” are common and therefore unlikely to mislead or confuse users.

121. Finally, Dr. King’s proposed “condensed” flow of three steps—(1) click settings, (2) click cancel, (3) click confirm—would be highly unusual in comparison with the same flows on comparably large websites, and could introduce accidental cancellations, malicious or prank cancellations, and other errors and issues not covered here. In my review of ten other large websites with subscription services, I found that eight required five or more steps to cancel, eight included a survey, seven included an observed retention prompt, and three included reauthorization to proceed.<sup>93</sup> Match.com’s process is not unusual, overlong, or in need of a major overhaul as Dr. King suggests. It is standard and therefore should be familiar to subscribers. Dr. King might believe her proposed version to be simpler than Match.com’s current flow, but Dr. King never explains why a flow other than her proposed “condensed” flow is not “simple.”

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<sup>93</sup> See Expert Report of Brandon Ward at 31.

122. Moreover, although Dr. King touts that her proposed re-design involves fewer steps, as discussed above and in my opening report, the number of steps in a process is not an indicator of simplicity. Sometimes more steps mean less friction and improved usability.
123. Additionally, this kind of design exploration ignores the complexities of designing websites for businesses (especially large e-Commerce websites), including necessary trade-offs. For example, a cancelation flow without a password reauthentication page might involve fewer steps, but a higher risk of unintentional or fraudulent cancelations. Or putting “Cancel Account” directly within Settings might decrease the number of steps but result in more options on the Settings page, making the Settings page overall less usable. Or removing the retention offer page might make the flow shorter, but it removes an opportunity for subscribers who want a continued subscription at a decreased price to take that offer, ultimately decreasing consumer good. Anyone can “armchair” redesign anything they want, but Dr. King has no evidence her proposed alternative would be any more or less simple than the current or past iterations, nor any evidence as to why similar proposals were not implemented at Match.com. It’s all conjecture without evidence. All evidence to date indicates Match.com’s flow is simple and easy to find and execute.

## VIII. CONCLUSION

### I. Summary of key rebuttal points

124. Dr. King’s report is unreliable due to several limitations and flaws in her methodology.
125. First, Dr. King relied solely on an analysis of screenshots and videos and did not attempt the process herself or observe any substantial group of objective users. As a result, her conclusions about user experience are based on speculation and lack supporting data or evidence.

126. Second, Dr. King's analysis fails to account for the context of why users are trying to cancel and ignored key factors relevant to the process. Without any external, objective input or insight into her process, her conclusions are mere speculation.

127. Third, Dr. King relies heavily on a small set of usability heuristics that are open to interpretation and subject to diverging from real-world user experience. She also provides no objective justification for her choices of which standards or guidelines to apply and which to ignore.

128. Finally, her report contains some factually inaccurate analyses leading her to misapply some heuristics and come to erroneous conclusions.

129. Overall, Dr. King's report is unreliable as an objective report on reality and does not provide a valid basis for the conclusion on the findability and ease of use of the cancelation process on Match.com.

## II. Summary of my position

130. As stated in my opening report, in my professional opinion, the Match.com online cancelation process is simple, clear, and efficient. It is accessible through common icons, with clear labeling and a logical, brief path. My analysis shows it meets Nielsen's usability and simplicity heuristics and the 5 quality components of usability.

131. The results of my empirical usability study showed that, of participants tasked with subscribing then canceling on Match.com, **98.78% successfully found Manage Subscription**, the entry point to canceling, **91.5% successfully canceled** with an average time of **74 seconds**, on average **6.1 times faster** than subscribing, making it even easier than the signup process. Match.com received an **"A Grade" (81.6)** on the System Usability Scale. Additionally, actual Match.com user data also supports this, with a **95% success rate** and a median cancelation time of **44 seconds**, which is quite a bit quicker than the subscription process.

132. The study participants agree that Match.com's cancelation flow is simple:

- a. **88.3% of participants thought canceling was simple** or were at least neutral as to the simplicity/difficulty.
- b. **84.7% of participants thought canceling was at least as simple as signing up.**

133. With respect to Dr. King's initial query, the data indicate, and I must therefore conclude:

- a. Was Match.com's cancelation process easy to use? **Yes.**
- b. Was Match.com's cancelation process easy to find? **Yes.**

DATED: May 15, 2023

A handwritten signature in black ink, appearing to read "Brandon E.B. Ward", with a stylized, cursive script.

Brandon E.B. Ward

## Curriculum Vitae of Brandon E.B. Ward

### **BRANDON E.B. WARD – CXO, EXPERIENCE DESIGN LEADER/SPEAKER/EDUCATOR**

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I seek executive design leadership opportunities where the people using the product are at the heart of the business.

My career has included designing experiences, leading, speaking, teaching, writing, and directing; creating and developing unique, award-winning, and usable software, mobile apps, websites, and AR/VR experiences.

I hold a master's degree in Interactive Media Design and 3 Bachelor's degrees in Music and Theatre.

### SKILLS

**LEADERSHIP** Team building, Mentoring, Management, Product, Scrum, Speaking, Teaching

**DESIGN** UX/UI/Service, Web, Sound, Instructional, Graphic, Product

**PRODUCTION** Software, Web, Mobile, Graphic, Audio, Video

**LANGUAGES** English, Cebuano, Hiligaynon, Tagalog

### EXPERIENCE

**PRECOCITY** – Chief Experience Officer (CXO), Senior Director of User Experience 2016 - Present

I lead the UX efforts both internally and as a consultant. I work closely with the executive team to define Precocity's UX practice, methods, tools, ethos, and culture. As a consultant, I execute these philosophies and practices for a variety of clients, from research and testing to UX/UI design to audio and video production. I was in charge of sourcing, interviewing, and hiring consultants and executives, as well as mentoring the UX/UI teams. I coordinate with the heads of the Data Science and Engineering departments to align our visions to ensure a cohesive, comprehensive, data-driven design offering.

- Designed, led, and executed Toyota's first usability research initiatives across their in-car and mobile software experiences, helping change how Toyota approaches software projects globally

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- Worked closely with the executive team to attract, pitch, and land new business, write proposals, and statements of work
- Authored and designed Precocity's branded design process IDEA
- Authored, designed, and built Precocity's branded redesign process and tool EVO
- Represented Precocity at various conferences, networking, building new client relationships
- Consulted with small, medium, and Fortune 10 clients – Research, Information Architecture, UX/UI/Graphic Design, Rapid Prototyping, Usability Testing, Design Studio, Planning, Brainstorming, and Workshops

**SERVICE DESIGN NETWORK - DALLAS – Founder & Host      2018 - Present**

Co-founded this meetup, in-person and virtual. Grew to 1785 members in 2 years.

**IMPACT UTAH – Chief Experience Officer (CXO)      2015 - 2023**

I helped drive the service, experience, and brand design of iImpact Utah, and its holding companies. We offer best-in-class management consulting across a variety of industries.

**SOUTHERN METHODIST UNIVERSITY – Instructor      2015 - Present**

I teach User Experience Design, and Service Design as part of CAPE's design/development certificate programs.

**IMPROVING ENTERPRISES – Senior Experience Designer      2013 - 2015**

As a senior consultant for Improving Enterprises, I represented Improving's UX and Design interests for select clients. I worked both on-site and remotely with them, investigating their current and future products and services. I conducted user research and usability tests and designed wireframes, prototypes, and mockups based on that research. I worked closely with leadership across all teams, including the C-suite, both client-side and within Improving.

- Worked closely with executives, product ownership, and development to ensure quality and correct results
- Major point of contact between client executives and Improving Enterprises
- Conducted user research and usability tests for both new and redesigned projects



- Lead tool and process training
- Spoke at industry conferences
- Hosted user groups and meetings on behalf of Improving Enterprises

**STUDIOGOOD** – Director of UX/UI 2013

Lead the company in a shift from social to a digital agency and establish user experience as a core practice. Along with the leads from development and account management, I lead the development and implementation of a new responsive workflow process to build efficiencies while producing responsive websites, microsites, and Facebook tabs. Some projects required concept-to-execution turnaround in as little as 5 days.

- Helped establish a new responsive, agile design/development process for producing responsive websites.
- Lead brainstorming sessions for idea generation for client pitches, and social and marketing strategies
- Interviewed and counseled every person in the company as to what was wrong and how we could fix it - instituted changes to help with major issues, and morale.
- Coordinator for design and development teams, ensuring team parity during the lifetime of the project.
- Designed social graphics, posts, and media for major brands.
- Designed responsive websites, Facebook Tabs, and microsites (wireframe, UI, layout, graphics, icons)
- Established regular brown-bag meetings where members of the team could share new ideas and skills with the rest of the company
- Built and established usage of a central company Wiki, taught teams how to use it

**TRIGEO/SOLARWINDS** – Director of UX/UI, Lead/Senior Developer 2009 - 2013

I lead the front-end team in the design and implementation of all features and fixes, including front-end development. At TriGeo, I helped completely redesign and launch our most successful product release ever (from UX to icons, to GUI, to packaging) leading to a record year for the company and a key factor in the company's acquisition in 2011 by SolarWinds for \$35 Million.

- Hired, built, and lead a new UX/UI Team of 6 developers and designers

- Designed and developed interaction flow, icons, color schemes, and palettes, dynamic dashboards, custom search, and query interfaces, reporting tools, labels, packaging, marketing materials, and more.
- Oversaw rebranded and updated product for release just 1 month after acquisition
- Wrote many custom components, and established coding best practices and standards.

**BRAINBOX ENTERTAINMENT** – Senior Designer & Flex Developer 2008 - 2009

Contracted to bridge the gap between design and development for a new online customer-facing sporting platform (kronum.com). Helped lead the project in terms of development, scope, communication, art preparation, skinning, themes, and more.

**DELVE NETWORKS** – Senior UX & UI Designer 2008

UX/UI Designer for the front and back-end applications of this startup focused on video search. Quickly learned new skills to take on additional design implementation development roles to augment the team.

**MEDIAPRO** – Development Coordinator, UI Designer/Developer 2005 – 2007

Contracted as Flash developer and quickly brought on full-time to multiple projects for graphic design, video and audio consultation, and voice-over talent. Soon advanced to full-time development coordinator. Trained 2 new developers and oversaw their progress. Highly sought-after designer/developer for internal projects for clients like American Express and Microsoft.

**STAFFING TOOLS** – Director of Production 2000 – 2004

UI design, MM Director, and Flash development of training and testing for digital design tools

**TALKS**

- UX Without the U is Your X
- Ethics Ex Machina: Designing the Future with a Conscience
- In Case of Emergency, Break Taboo
- The Triforce of UX: How to Hire a Great UX Designer
- Service Design: Your Next Career Move
- Designing a Great Experience: The ROI of UX

- Project Operation: Improving complex systems w/out killing the patient
- UX As a Service: 5 Strategies to Elevate Design Thinking in Your Organization

## EDUCATION

### **Master of Science in Interactive Media**

Indiana University, Bloomington // 2004

Taught Video Production and Non-linear Video Editing 101

### **B.A., multiple degrees in Vocal Performance, Music Theory and Composition and Theatre**

Dean's List, Cum Laude

College of Idaho, Caldwell // 2000

# EXHIBIT 5

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UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF TEXAS  
DALLAS DIVISION

FEDERAL TRADE COMMISSION,

Plaintiff,

v.

MATCH GROUP, INC.,

Defendant.

Case No. 3:19-cv-02281

**Rebuttal Expert Report to Dr. King's Rebuttal Report**

**James Langenfeld, Ph.D.**

**June 14, 2023**

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## I. QUALIFICATIONS

1. My name is James Langenfeld and I am a Managing Director at Berkeley Research Group (BRG), an economic consulting firm specializing in applied microeconomics, analysis of damages in contract disputes, mass torts, antitrust, intellectual property, labor, and financial analysis. I am also the Co-Editor of the journal *Research in Law and Economics*.
2. For almost ten years, I held a variety of positions at the Federal Trade Commission (“FTC”) involving antitrust, consumer protection, regulatory impact, and equitable relief matters. These positions included Director for Antitrust in the FTC’s Bureau of Economics, Deputy Director of Economic Policy Analysis, Associate Director for Special Projects, and Economic Advisor to a Commissioner and to the Director of the Bureau of Consumer Protection. In all these positions, I was involved in investigations, analyses, and policy recommendations. I received the SES Meritorious Service Award, the FTC Distinguished Service Award, and was an Honoree at the Department of Justice’s Celebration of the Twentieth Anniversary of the 1982 Merger Guidelines.
3. As a consulting economist, I have testified as an economics expert in federal and state courts in many cases, and I have testified and written reports on a variety of economic topics, including consumer protection, contract disputes, and the quantification of damages. These matters have involved a variety of industries and clients, including digital platforms.
4. As an Adjunct Professor, I have taught courses in Law and Economics, which include the economics of quantifying damages in contract disputes using analytic and statistical methodologies. I have also published many scholarly writings on various economic issues, including estimation of damages and econometric analyses.
5. I received a Ph.D. in economics from Washington University in St. Louis and an A.B. from Georgetown University in Washington D.C. My areas of specialization include economic analysis of the operation of platforms and estimation of damages.

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6. I am a member of several professional societies and am Co-Chair of the Economics Committee of the Antitrust Section of the American Bar Association. A copy of my curriculum vitae, which summarizes my experience, is attached as Exhibit 1.
7. BRG bills \$800 per hour for my time.

## II. NATURE OF DISPUTE

8. This matter involves a complaint by the U.S. Federal Trade Commission (“FTC”) against Match Group, Inc. and Match Group, LLC (“Defendants”).<sup>1</sup> The FTC alleges that Defendants engaged in deceptive or unfair practices on Match.com since at least 2013,<sup>2</sup> including alleged illegal practices related to a “confusing and cumbersome cancelation process that causes consumers to believe they have canceled their subscriptions when they have not.”<sup>3</sup> The FTC seeks an injunction, monetary relief, monetary civil penalties, and potentially other relief.<sup>4</sup>

## III. ASSIGNMENT

9. Counsel for Defendants has asked me to respond to a rebuttal expert report provided by Dr. Jennifer King on behalf of the FTC on May 15, 2023. In this report, Dr. King criticizes work by Defendants’ usability expert, Mr. Brandon Ward, and questions some of his arguments about usability research practices.<sup>5</sup> In particular, Dr. King criticizes Mr. Ward for not examining customer comments about Match.com’s cancelation flow.<sup>6</sup> I understand that Dr. King introduces her own analysis of customer comments for the first time.<sup>7</sup> Counsel for Defendants has asked me to review and critique this new analysis.
10. In the course of conducting my analysis, I and members of my staff reviewed relevant data, various legal filings, and publicly available information. The documents and data I have reviewed and relied upon are the type of materials reasonably relied upon by experts

---

<sup>1</sup> See First Amended Complaint for Permanent Injunction, Monetary Relief, Civil Penalties, and Other Relief, Case No. 3:19-cv-02281, July 18, 2022 (hereafter, “*Complaint*”).

<sup>2</sup> *Complaint*, ¶ 3.

<sup>3</sup> *Complaint*, ¶ 3.

<sup>4</sup> *Complaint*, ¶ 89.

<sup>5</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, Sections 1 and 2.

<sup>6</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 3 and Sections 2 and 5.

<sup>7</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, Section 5.



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in my field in forming their opinions and inferences regarding the economic structure of firms and costs. These materials are listed in Exhibit 2 and/or denoted within this report. Should additional information, data, or reports be produced subsequent to my report, I reserve the right to consider such information in finalizing my opinions and may modify or expand my analyses if appropriate.

#### IV. SUMMARY OF OPINIONS

11. Dr. King's opinions regarding consumer comments are not representative of Match.com users' views of Match.com's cancelation process. Her review does not reflect the experience of the 2.9 million users who completed the cancelation process from 2016 to early 2018 (the period of the comments she reviews), nor the vast majority of the 96,390 users who did not complete the cancelation process. She only considers the portion of the users who had comments.
12. Research indicates commenters do not represent the views of most users, and are more likely to have extreme negative views. This literature warns about the likely bias in these complaints, making them not representative of the population of users and highlighting the unreliability of Dr. King's conclusions.
13. Dr. King only analyzes a subset of the experiences of the most unsatisfied consumers, and does not consider the experiences of the vast majority of users who did not leave a comment. In particular, the biased comments sampled by Dr. King account for only 0.021% of the subscribers who entered Match.com's cancelation process (i.e., viewed the First Survey page); 0.022% of the subscribers who successfully completed Match.com's online cancelation process; and 0.662% of subscribers who renewed after entering the cancelation process without completing it (all of whom Dr. King in effect assumes intended to cancel). Dr. King's analysis effectively ignores the over 99% of subscribers who used the cancelation process but did not have a comment in the file that she reviewed. In addition, the comments reviewed by Dr. King represent only a small portion of users' interactions with Match.com's customer service team. This small selection of biased user comments cannot be extrapolated to the overall experience of Match.com users.

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14. Dr. King's categorization of comments is inconsistent, erroneous, and misleading. Dr. King has used what appears to be arbitrary and subjective criteria for her classifications. At least some of Dr. King's classifications of comments appear incorrect, and many are vague about their exact concerns. Even within this unreliable data, a substantial portion of commenting users were either Very Satisfied, Somewhat Satisfied, or Neither Satisfied Nor Dissatisfied with Match.com's service, as reported in the very spreadsheets that Dr. King cites reflecting the comments.
15. Dr. King relies on subscriber comments to investigate whether the Match.com "online cancellation flow is simple." However, Dr. King never attempted to evaluate the actual experience of users who commented. Match.com data that tracks the actual experience of the commenters contradicts Dr. King's conclusions. First, a significant share of the commenting users, 43.2%, did not enter the online cancellation process at all. If they did not attempt to use the cancellation process, presumably it was not the cause of their complaint and cannot be a basis for concluding the cancellation process was not simple. Second, of the remaining 56.8% of users who entered the online cancellation process, nearly 90% of them, were able to successfully cancel their Match.com subscriptions. This is inconsistent with concluding that subscribers were unable to cancel due to Match.com's process. In total, the vast majority of commenting users, 93.7%, either did not experience the cancellation process or successfully completed it.
16. Dr. King has no reliable basis for apparently claiming that older individuals were particularly harmed by Match.com's cancellation process.

## **V. BACKGROUND**

### **A. Match Group and Match.com**

17. Match.com is an online dating site.<sup>8</sup> Match Group, LLC owns and operates the site.<sup>9</sup> Match Group, Inc. is the holding company.<sup>10</sup>

---

<sup>8</sup> <http://www.match.com>.

<sup>9</sup> Match Group, LLC, "Our Company," <https://mtch.com/ourcompany>.

<sup>10</sup> Match Group, Inc., 2022 Form 10-K, p. 1.

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**B. Match.com's Cancellation Process<sup>11</sup>**

18. The FTC's allegations focus on the steps in Match.com's cancellation process, how those steps appeared to a subscriber, and how subscribers' interactions with the cancellation process were tracked in Match.com's data. The following eight figures display steps leading up to and including Match.com's current cancellation process, and I understand that Match.com has tracked the number of subscribers that reached each of these steps.<sup>12</sup>

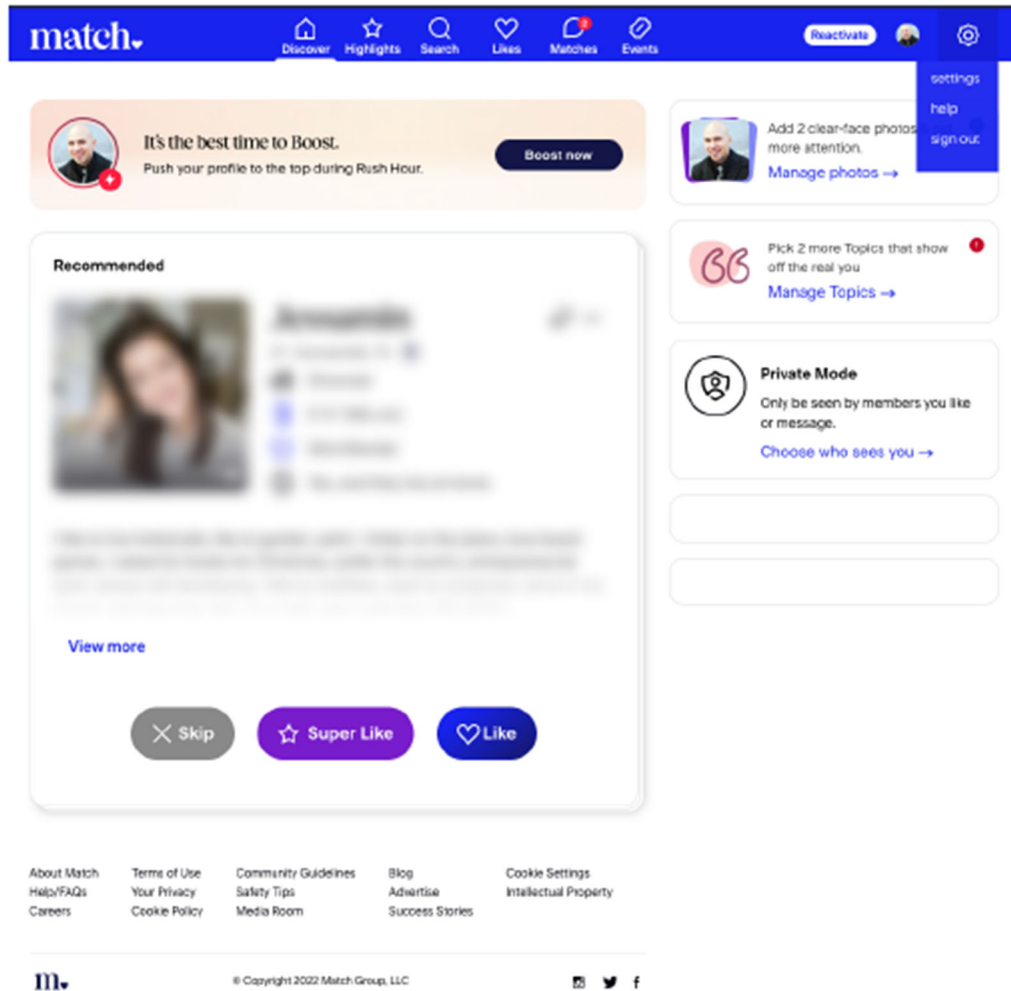
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<sup>11</sup> I understand that Defendants have provided an expert report by Brandon Ward, an expert in "website design and user experience," that describes Match.com's cancellation process in detail. Expert Report of Brandon Ward Regarding Match.com's Online Subscription Cancellation Flow, January 13, 2023, ¶ 8. I have taken into consideration both his work and my own independent analysis of relevant economic information and data.

<sup>12</sup> The screenshots are the same as those in Mr. Ward's report. I understand there is some disagreement about where the cancellation process begins. To be conservative, in depicting the cancellation process in Figures 1-8, I assume the FTC's view that the cancellation process begins with the clicking of "Manage Subscription" (or its predecessor link) on the Account Setting screen, which then directs the user to a password page, but this assumption should not be taken as my agreement with treating that page as the appropriate place at which the process begins. While the steps depicted are of Match.com's current cancellation process, I understand that this process has undergone changes since September 2014. Regarding prior versions of the cancellation process, Mr. Ward's report stated "Those pages are no longer on Match.com's live website, but I reviewed videos and/or screenshots of past versions of those pages. Reviewing those versions does not change my opinion that all versions of Match.com's online cancellation flow since at least September 2014 have been simple." Expert Report of Brandon Ward Regarding Match.com's Online Subscription Cancellation Flow, January 13, 2023, ¶ 103.

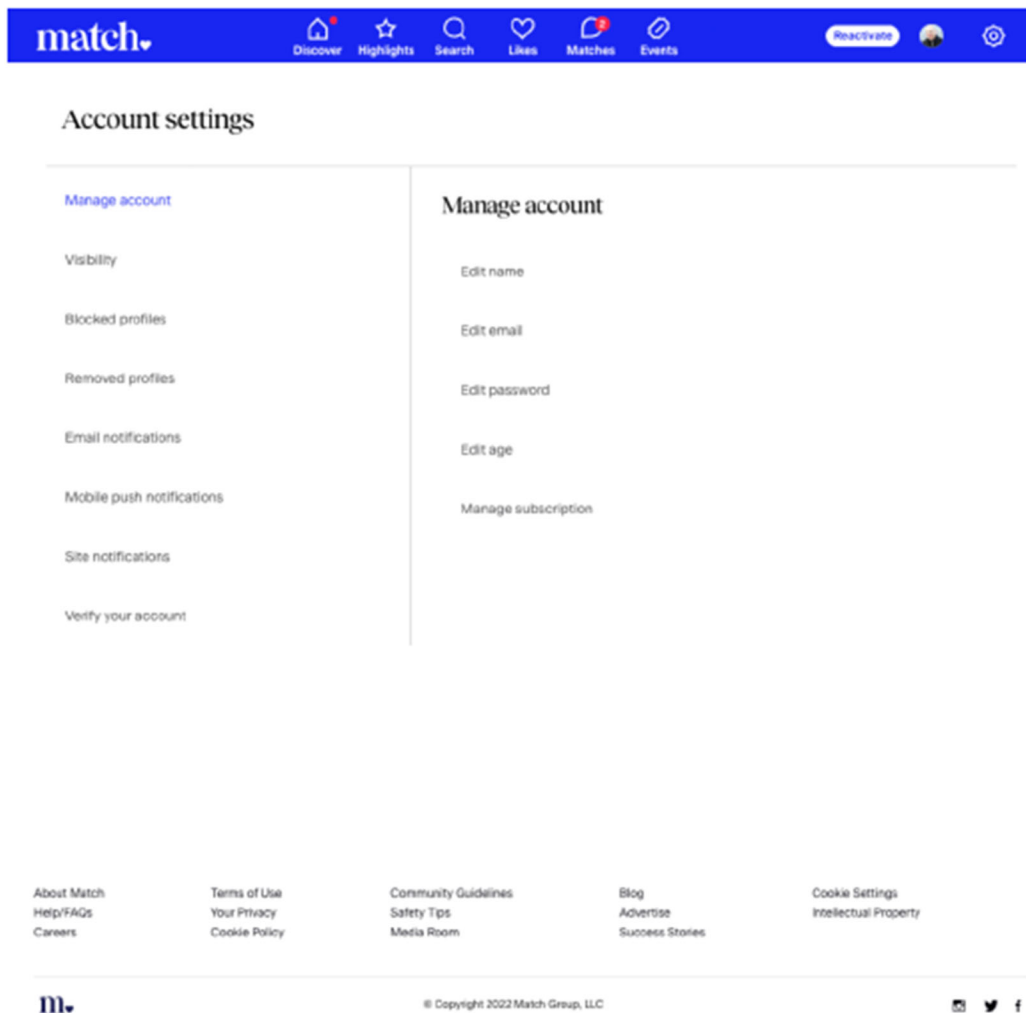
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**Figure 1**  
**Home Page**



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**Figure 2**  
**Account Settings**



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Figure 3

Reauthorization/Password Wall

match.

Discover Search Likes Matches Events Reactivate

Limited-time only! Get 4x more views for FREE START NOW

To continue, please supply your password.

The information you are about to view is private and requires your password to view it.

Please enter your password.

I'm not a robot reCAPTCHA Privacy - Terms

CONTINUE

[Forgot your password?](#)

About Match  
Accessibility Help  
Terms of Use  
Your Privacy  
Ad Choices  
Careers  
Cookie Policy

Online Dating Safety Tips  
Dating Articles and Advice  
Success Stories

Help/FAQs  
Contact Us  
Site Map  
Match International  
Media Room

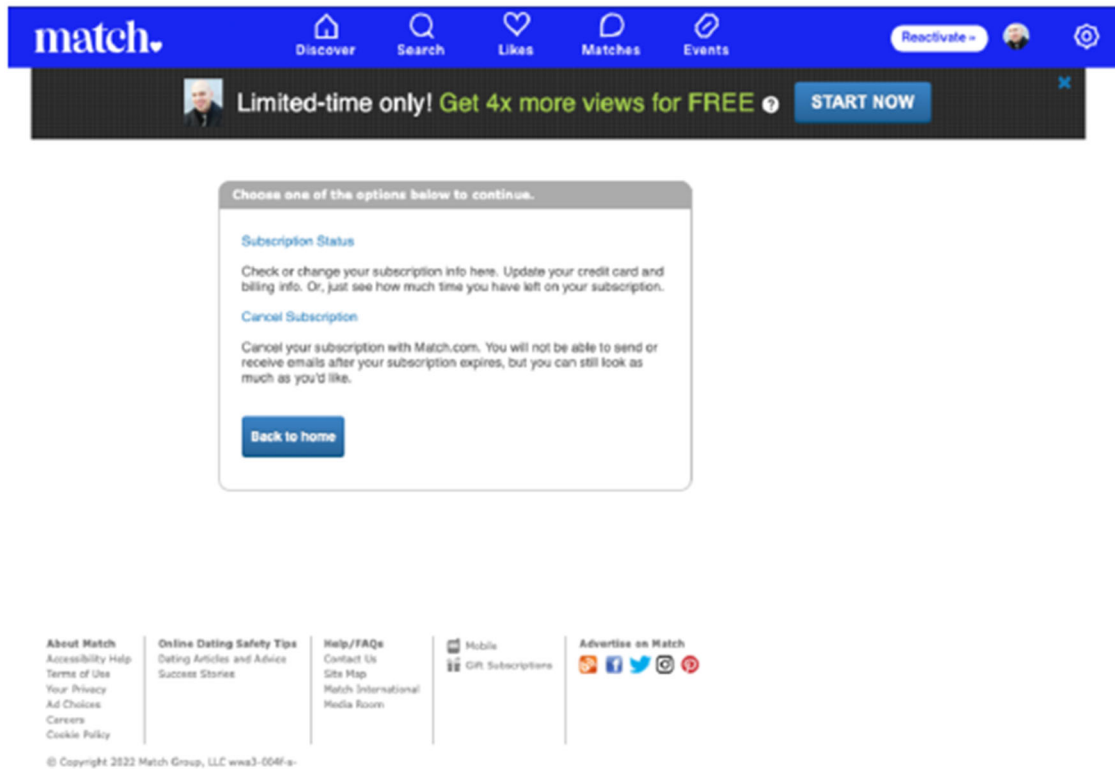
Mobile  
Gift Subscriptions

Advertise on Match

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**Figure 4**  
**Manage Subscription**



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Figure 5

## Question One/First Survey Page

The screenshot shows the Match.com interface for a cancellation survey. At the top is a blue navigation bar with the Match logo and icons for Discover, Search, Likes, Matches, and Events. A 'Reactivate' button and a user profile icon are also present. Below the navigation bar is a promotional banner for a limited-time offer: 'Limited-time only! Get 4x more views for FREE' with a 'START NOW' button. The main content area is titled 'Before you go, help us make Match.com better.' and contains a cancellation notice: 'If you cancel, your last day of subscription will be 12/30/2022 and you will not be renewed. You will continue to be billed every 2 weeks for the 2 remaining installment payments of \$32.31 (including tax) on your current subscription.' Below this is a question: 'What is the primary reason that you are looking to cancel your subscription with Match.com?' followed by eight radio button options. At the bottom of the survey are two buttons: 'Back to home' and 'Continue Cancellation'. The footer contains links for 'About Match', 'Online Dating Safety Tips', 'Help/FAQs', 'Mobile', and 'Advertise on Match', along with a copyright notice: '© Copyright 2022 Match Group, LLC www3-094f-9'.

match

Discover Search Likes Matches Events Reactivate

Limited-time only! Get 4x more views for FREE START NOW

Before you go, help us make Match.com better.

If you cancel, your last day of subscription will be 12/30/2022 and you will not be renewed. You will continue to be billed every 2 weeks for the 2 remaining installment payments of \$32.31 (including tax) on your current subscription.

What is the primary reason that you are looking to cancel your subscription with Match.com?

- ☐ I didn't receive enough replies to emails I sent out
- ☐ Other
- ☐ Not many people of interest initiated contact with me
- ☐ I had too much going on and did not have time to date
- ☐ Very few profiles piqued my interest
- ☐ I can't afford a subscription right now
- ☐ I met someone
- ☐ I didn't click with the matches I met in person

Back to home Continue Cancellation

**About Match**  
Accessibility Help  
Terms of Use  
Your Privacy  
Ad Choices  
Careers  
Cookie Policy

**Online Dating Safety Tips**  
Dating Articles and Advice  
Success Stories

**Help/FAQs**  
Contact Us  
Site Map  
Match International  
Media Room

**Mobile**  
Gift Subscriptions

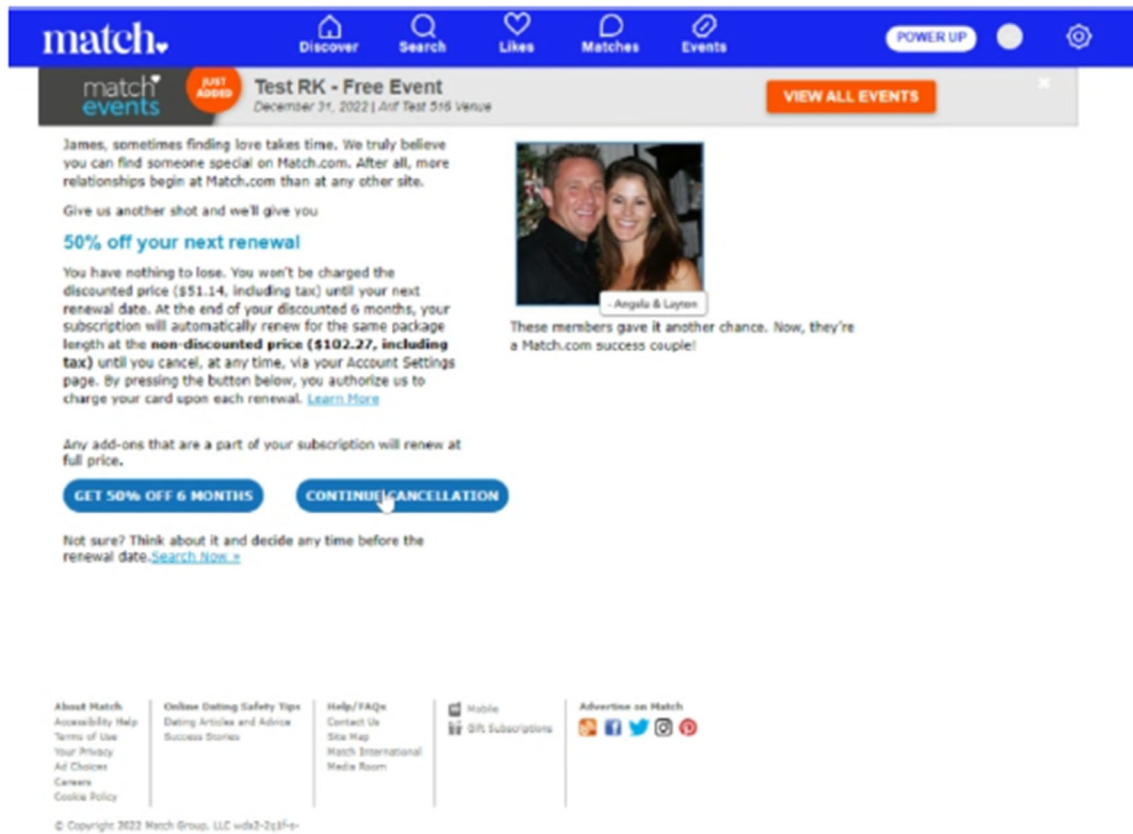
**Advertise on Match**  
S F T I P

© Copyright 2022 Match Group, LLC www3-094f-9



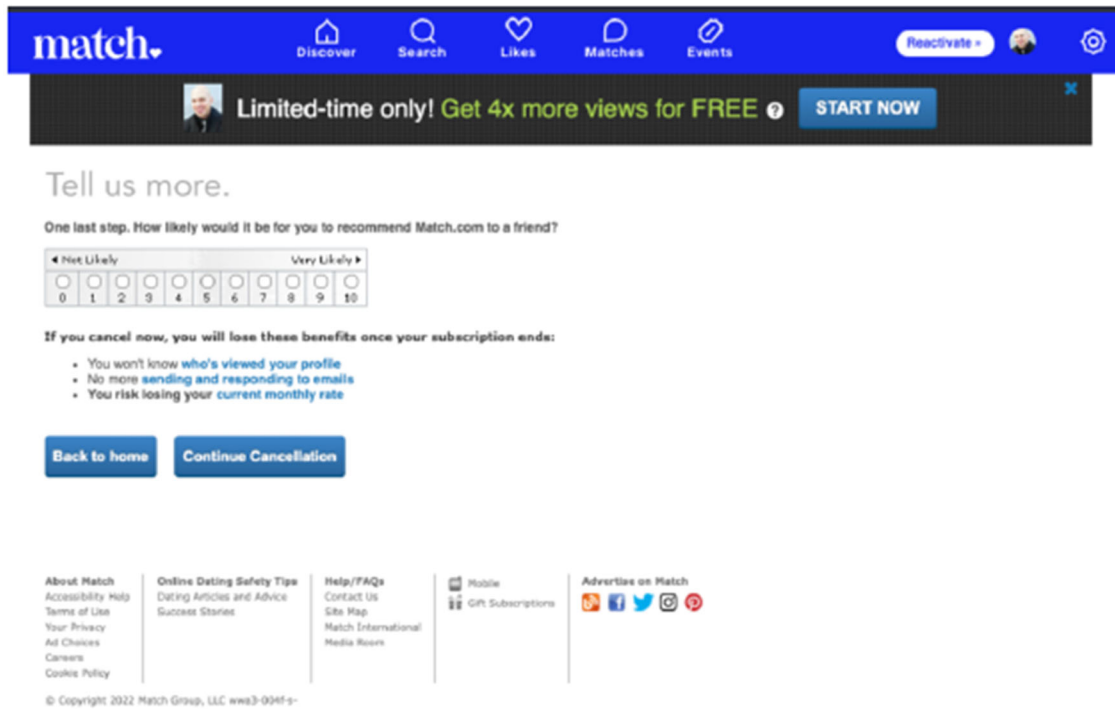
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**Figure 6**  
**Save Offer<sup>13</sup>**



<sup>13</sup> I understand that the save offer page is presented to only some users.

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**Figure 7****Question Two**


The screenshot shows the Match.com website interface. At the top is a blue navigation bar with the Match logo and icons for Discover, Search, Likes, Matches, and Events. A 'Reactivate' button and a user profile icon are also present. Below the navigation bar is a promotional banner for a limited-time offer: 'Limited-time only! Get 4x more views for FREE' with a 'START NOW' button. The main content area features a survey question: 'Tell us more. One last step. How likely would it be for you to recommend Match.com to a friend?'. Below the question is a horizontal scale from 0 to 10, with 'Not Likely' at the left end and 'Very Likely' at the right end. The scale is currently empty. Below the scale, a warning message states: 'If you cancel now, you will lose these benefits once your subscription ends:'. This is followed by a list of three bullet points: 'You won't know who's viewed your profile', 'No more sending and responding to emails', and 'You risk losing your current monthly rate'. At the bottom of the survey section are two buttons: 'Back to home' and 'Continue Cancellation'. The footer contains links for 'About Match', 'Online Dating Safety Tips', 'Help/FAQs', 'Mobile', and 'Advertise on Match', along with a copyright notice for Match Group, LLC.

match.

Discover Search Likes Matches Events Reactivate

Limited-time only! Get 4x more views for FREE START NOW

Tell us more.

One last step. How likely would it be for you to recommend Match.com to a friend?

◀ Not Likely Very Likely ▶

0 1 2 3 4 5 6 7 8 9 10

If you cancel now, you will lose these benefits once your subscription ends:

- You won't know who's viewed your profile
- No more sending and responding to emails
- You risk losing your current monthly rate

Back to home Continue Cancellation

About Match  
Accessibility Help  
Terms of Use  
Your Privacy  
Ad Choices  
Careers  
Cookie Policy

Online Dating Safety Tips  
Dating Articles and Advice  
Success Stories

Help/FAQs  
Contact Us  
Site Map  
Match International  
Media Room

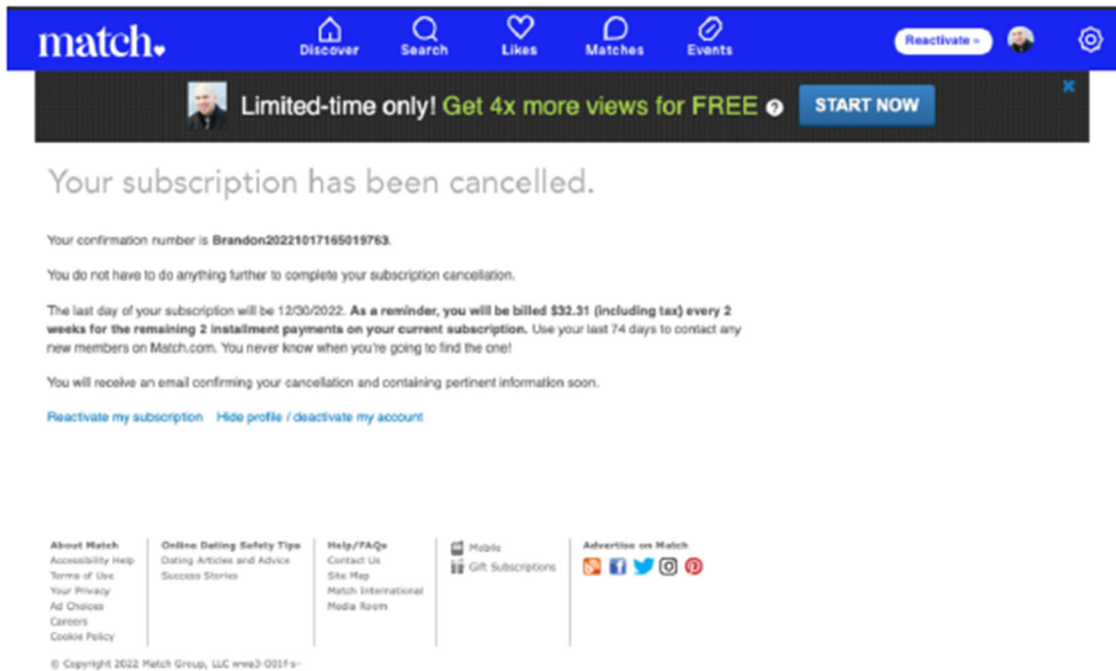
Mobile  
Gift Subscriptions

Advertise on Match

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**Figure 8**  
**Confirmation**



## VI. OVERVIEW OF KING AND WARD REPORTS

19. The FTC produced an initial expert report from Dr. Jennifer King, who concluded that Match.com's cancellation process was "not easy or simple to use," and "not easy for users to locate."<sup>14</sup> She elaborated, "The result of these problems was to make it difficult, if not impossible, for many Match.com users to cancel their subscriptions using the online cancellation process, with many believing that they had canceled their subscriptions when in fact, they had not, thus accruing additional charges."<sup>15</sup>
20. Defendants provided an expert report from Brandon Ward, an expert in "website design and user experience."<sup>16</sup> Mr. Ward concluded "the Match.com online cancellation process meets generally accepted standards of usability in the field and contains features common

<sup>14</sup> Expert Report of Dr. Jennifer King, January 13, 2023, p. 4.

<sup>15</sup> Expert Report of Dr. Jennifer King, January 13, 2023, p. 65.

<sup>16</sup> Expert Report of Brandon Ward Regarding Match.com's Online Subscription Cancellation Flow, January 13, 2023, ¶ 8.

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to other subscription websites.”<sup>17</sup> In addition, Mr. Ward studied how a sample of potential Match.com users were able to successfully navigate the sign-up and cancellation processes and evaluated Match.com’s subscriber data to determine how frequently subscribers successfully canceled subscriptions.<sup>18</sup> He concludes that study participants canceled easily, in particular canceling more easily than signing up, and participants believed cancellation was simple.<sup>19</sup> Finally, he reviewed subscriber data, and he found that the cancellation process was simple, consistent with what he found from his usability study.<sup>20</sup>

21. Dr. King provided a rebuttal report on May 15, 2023.<sup>21</sup> In her Rebuttal Report, Dr. King criticizes Mr. Ward’s heuristic analysis, and offers opinions about some of his conclusions about usability research practices.<sup>22</sup> She criticizes his study involving a sample of participants selected to use Match.com’s cancellation flow.<sup>23</sup> Finally, and as she states, “importantly,” she criticizes Mr. Ward for failing to examine customer comments about Match.com’s cancellation flow.<sup>24</sup> Section 5 of her rebuttal report introduces her own analysis of customer comments.<sup>25</sup>

22. I focus my rebuttal to Dr. King on Section 5 of Dr. King’s Rebuttal Report. Dr. King states that:<sup>26</sup>

Comments, complaints, or questions from a company’s customers provides an organic source of information about their experience with a product or service. They reveal a customer-centric perspective of a product or service’s primary challenges and problems. In this way, they are an excellent complement to a heuristic analysis as they provide “raw” feedback directly from customers that may both highlight issues identified by the heuristic analysis as well as raise other customer concerns.  
[footnote omitted]

<sup>17</sup> Expert Report of Brandon Ward Regarding Match.com’s Online Subscription Cancellation Flow, January 13, 2023, ¶ 20.

<sup>18</sup> Expert Report of Brandon Ward Regarding Match.com’s Online Subscription Cancellation Flow, January 13, 2023, ¶¶ 16-17.

<sup>19</sup> Expert Report of Brandon Ward Regarding Match.com’s Online Subscription Cancellation Flow, January 13, 2023, ¶ 21.

<sup>20</sup> Expert Report of Brandon Ward Regarding Match.com’s Online Subscription Cancellation Flow, January 13, 2023, ¶ 22.

<sup>21</sup> Mr. Ward also provided a rebuttal report on May 15, 2023. Mr. Ward states that Dr. King “conducted no empirical research to support her conclusions” and no “objective analysis,” and merely relied on screenshots and company communications. Rebuttal of Dr. King’s Report Regarding Match.com’s Online Subscription Cancellation Flow, May 15, 2023, ¶¶ 4-5.

<sup>22</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, Sections 1 and 2.

<sup>23</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, Sections 3 and 4.

<sup>24</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 3 and Sections 2 and 5.

<sup>25</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, Section 5.

<sup>26</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 22.

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23. Dr. King limited her review of comments submitted to Match.com to those from 2016 to early 2018 under a category Match.com's customer service team described as "difficult cancel process."<sup>27</sup> Dr. King states this category accounted for approximately 6% of comments in the "Billing/Cancel" category in 2016,<sup>28</sup> which is a small portion of all comments and 2% of all the comments included in the spreadsheets that Dr. King analyzed.<sup>29</sup> From this subset of comments, Dr. King randomly selected 28% of the comments (638 total comments), which she states constitutes a representative sample of comments.<sup>30</sup>
24. After having selected a subset of comments, Dr. King categorized each comment as showing "Confusion with the Cancellation Process," concerns with "Cancellation Policy," or "Other," for comments that did not fit into the first two categories.<sup>31</sup> She further subclassified the comments as "Unable to Cancel," "Believed Had Canceled," "Auto Renewal Issues," "Multiple Steps," "Delete Personal Data," "Password Issues," or "Other."<sup>32</sup> Dr. King finds that about 75% of the limited set of comments that she reviewed showed "user confusion about cancellation."<sup>33</sup> Dr. King then provides what she calls "examples of relevant comments."<sup>34</sup>
25. Next, Dr. King provides a subsection called "Older Customers," stating:<sup>35</sup>

One notable element of the Match.com comments dataset is that it contained customer email addresses, and as I reviewed them I observed what looked to be an unusual number of email addresses that suggested an older aged customer base. ... this group is of particular concern because, being less experienced with online services than younger users, they are a group particularly vulnerable to dark patterns and complex and confusing user interface design.

<sup>27</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 23. That time period limitation raises other questions about whether her "analysis" can be truly representative of Match.com users.

<sup>28</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 23. In 2016, the "difficult cancel process" category contained 1,314 submissions, and the entire Billing/Cancel category contained 23,371 complaints, so "difficult cancel process" was 6% of this total. In 2017 and 2018, "difficult cancel process" accounted for 3.3% and 2.2% of "Billing/Cancel", respectively. Overall, for 2016-2018, "difficult cancel process" accounted for 4.2% of "Billing/Cancel".

<sup>29</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 23; MATCHFTC772558, MATCHFTC776595, MATCHFTC776596 (2,341 comments in the "difficult cancel process" category divided by 109,377 total comments equals 2.14%, see workpapers to this report).

<sup>30</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 25.

<sup>31</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 26.

<sup>32</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 26-27.

<sup>33</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 28-29.

<sup>34</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 30-35.

<sup>35</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 35-38.

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26. Dr. King also describes her review of “roughly fifty” complaints from the FTC’s Sentinel database, which she “identified by keyword search based on concerns directly raised in the Match.com complaints discussed above: ‘confusing,’ ‘misleading,’ ‘auto renewal,’ ‘password,’ ‘steps’ (in reference to the steps required to complete cancellation).”<sup>36</sup>
27. Overall, Dr. King concludes:<sup>37</sup>

In summary, the Match.com customer comments and complaints to the FTC provide a rich and in-depth look into the first-hand experience of actual Match.com customers’ experience with the cancellation process. Unlike Ward’s sunny assessment of the cancellation flow, these comments illustrate the confusion and frustration customers experienced with the cancellation flow. Further, they demonstrate with great deal and precision the usability flaws inherent in the flow ...

## **VII. DR. KING’S ANALYSIS OF COMMENTS REPRESENTS A VERY SMALL AND POTENTIALLY BIASED SET OF MATCH.COM USERS**

28. Dr. King concludes “[t]he customer comments are pertinent in that they provide insight from actual users of Match.com about the central issue of whether Match.com’s online cancellation flow is simple.”<sup>38</sup> However, Dr. King’s analysis of user comments does not answer the question of whether Match.com’s online cancellation flow is “simple.” Instead, as I describe in the following subsections, Dr. King samples comments from a very small fraction of Match.com subscribers who, by virtue of leaving a comment at all, are more likely to have felt extremely negative about their experience. Dr. King also in effect assumes as true each of the assertions made in the comments, but there is objective evidence that a large percentage of these comments are inconsistent with the documented experiences of the commenters. If Dr. King truly wanted to generate “insight from actual users of Match.com about the central issue of whether Match.com’s online cancellation flow is simple,” she would have attempted to evaluate (by survey or otherwise) the experiences of a representative sample of the millions of subscribers who entered and completed the cancellation process, as well as the tiny minority of users who did not complete it. Dr. King makes no attempt to do that, or even to get an unbiased sample of

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<sup>36</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 38-39.

<sup>37</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 41.

<sup>38</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 3.

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the full 96,390 subscribers who entered the cancellation process (using clicking “cancel subscription”/reaching the First Survey Page as the start of the cancellation process) from 2016 to early 2018 but then renewed.<sup>39</sup>

**A. The Comments Considered by Dr. King Are Not Representative of a Typical User’s Experience**

29. Dr. King states that her analysis of user comments “demonstrate[s] with great deal and precision [sic] the usability flaws inherent in the flow.”<sup>40</sup> Analyzing a miniscule number of a specific type of user comments does not yield a “precise” representation of Match.com users’ experience. During the January 1, 2016 to March 1, 2018 period covered by comments reviewed by Dr. King, over 3 **million** subscribers entered the cancellation process, about 2.9 million subscribers completed the online cancellation process, yet only about 96,000 subscribers started the cancellation process, did not complete it, and had their subscriptions renewed.<sup>41</sup> Additionally, over 125,000 subscribers resigned via Match.com’s customer service team.<sup>42</sup> An appropriate review of users’ experience would place the appropriate weight on this 97.4% of subscribers who successfully canceled via the online process or the customer service team.<sup>43</sup>

**B. The Number of Comments Considered by Dr. King Represent a Very Small and Biased Fraction of Match.com Users Entering the Cancellation Process, Users Completing the Cancellation Process, and Users Whose Subscriptions Were Renewed**

30. As mentioned above, Dr. King states “the Match.com customer comments and complaints to the FTC provide a rich and in-depth look into the first-hand experience of actual Match.com customers’ experience with the cancellation process.”<sup>44</sup> This statement is misleading in that it appears to imply that one can draw broad and unbiased conclusions about users’ experiences from the small fraction of users whose comments Dr. King reviewed and in effect assumed were reliable. Specifically, the comments reviewed by

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<sup>39</sup> As noted above, I understand there is disagreement about where the cancellation flow “begins.”

<sup>40</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 41-42.

<sup>41</sup> MATCHFTC846468.

<sup>42</sup> MATCHFTC846468.

<sup>43</sup> MATCHFTC846468. Specifically, 93.2% canceled via the online process, and 4.2% canceled via the customer service team.

<sup>44</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 41.

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Dr. King account for only a very small percentage of the total users who entered the cancelation process, completed the cancelation process, or who entered the cancelation process and had their subscriptions renewed. As discussed below in Section VII.D, research shows that this small sample is in all likelihood biased because only consumers with extremely negative views take the time to comment, and do not represent the experiences of (in this case) the majority of users or users who enter the cancelation flow.

31. Dr. King reviewed 638 user comments covering January 1, 2016 to March 1, 2018. During that same time period, over 3 **million** subscribers entered the cancelation process, about 2.9 **million** subscribers completed the online cancelation process, and about 96,000 subscribers started the cancelation process, did not complete it, and had their subscriptions renewed.<sup>45</sup> Thus, the comments reviewed by Dr. King accounted for only 0.021% of subscribers who entered the cancelation process, about 0.022% of subscribers whom she in effect assumed they completed the online cancelation process, and about 0.662% of subscribers who started the cancelation process, did not complete it, and had their subscriptions renewed. In other words, the comments reviewed by Dr. King accounted for about 1 in 4,800 subscribers who entered the cancelation process, about 1 in 4,500 subscribers who completed the online cancelation process, and about 1 in 150 subscribers who started the cancelation process, did not complete it, and had their subscriptions renewed.<sup>46</sup> Dr. King's analysis effectively ignores the over 99.9% of subscribers who used the cancelation process but did not have a comment in the file that she reviewed.

32. The number of FTC Sentinel comments that Dr. King reviewed is even smaller. Dr. King says she reviewed "roughly fifty" complaints from the FTC's Sentinel database.<sup>47</sup> Dr. King lists 30 such comments in her Appendix A and 13 in her rebuttal report,<sup>48</sup> so it is

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<sup>45</sup> MATCHFTC846468. This statement is not intended to imply that the 96,000 subscribers that entered the cancelation process intended to complete it or were unable to do so because the process was not simple. There are many reasons that a subscriber could start the cancelation process but not finish it, such as they changed their mind, never intended to cancel but were just exploring, were attempting to generate a save offer, were interrupted during the process, etc.

<sup>46</sup> Even if the 638 comments reviewed by Dr. King were not a biased representation of the approximately 96,390 subscribers that entered the cancelation process but renewed, they would not account for a statistically representative sample of subscribers, such as what Dr. King attempts to create in selecting random comments from the total number of comments she received. If Dr. King sought to review a sufficient number of comments to represent the 96,390 subscribers, she would have had to review nearly double the number of comments, to 1,178. *See* workpapers to this report.

<sup>47</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 38.

<sup>48</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 38-41 and Appendix A.



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unclear how many she actually reviewed. However many she reviewed, they account for under 0.01% of subscribers who entered or completed the cancelation process.

**C. The Comments Considered by Dr. King Represent a Very Small Fraction of Users' Interactions with Match.com's Customer Service Team**

33. While the comments reviewed by Dr. King account for a tiny fraction of Match.com users, they also represent only a small portion of users' interactions with Match.com's customer service team. As Dr. King states, the "difficult cancel process" classification of comments that she reviewed only accounted for 6% of the 23,371 comments in the Billing/Cancel category in 2016.<sup>49</sup> After analyzing the comment totals from the three Excel files reviewed by Dr. King, it is clear that the category related to difficulty in canceling accounts represents a fraction of the overall comments submitted to Match.com. Specifically, the comments falling under the general category of Billing/Cancel examined by Dr. King account for about half of the recorded interactions between Match.com and its users in these excel sheets.<sup>50</sup> More importantly, the subset of comments categorized as "difficult cancel process" amounts to only 2% of the total comments produced.<sup>51</sup> Clearly, the "difficult cancel process" category does not dominate users' interactions with Match.com customer service, so Dr. King's focus on this small slice of comments greatly exaggerates the degree to which users may have struggled with the process.

**D. Bias in Dr. King's Small Sample**

34. As discussed above, the small sample of comments Dr. King chose to review does not include the vast majority of Match.com users, and is likely unrepresentative. Moreover, there are reasons to believe these comments, to the extent they are accurately classified, are also likely to be biased and imply more dissatisfaction than users typically experience.

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<sup>49</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 23. In 2016, the "difficult cancel process" category contained 1,314 submissions, and the entire Billing/Cancel category contained 23,371 complaints; "difficult cancel process" was therefore 6% of this total. In 2017 and 2018, "difficult cancel process" accounted for 3.3% and 2.2% of "Billing/Cancel", respectively. Overall, for 2016-2018, "difficult cancel process" accounted for 4.2% of "Billing/Cancel".

<sup>50</sup> MATCHFTC772558, MATCHFTC776595, MATCHFTC776596.

<sup>51</sup> MATCHFTC772558, MATCHFTC776595, MATCHFTC776596. Dr. King's analysis suggests a degree of data cleaning to address duplicate entries. However, I have refrained from conducting similar cleaning procedures as the disparities in numbers are not significant enough to impact the proportions. Additionally, the specific details of Dr. King's data cleaning process have not been explicitly outlined in her report or accompanying documentation.

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35. “Underreporting bias” refers to the self-selection bias in online product reviews. Consumers with extreme experiences, whether positive or negative, are more likely to write reviews than the vast majority of users.<sup>52</sup> Underreporting bias arises because “not all customers write online product reviews due to the time and effort needed.”<sup>53</sup> Statistics show that only a small fraction of people who purchase a product on platforms like Amazon (e.g. 1 out of 1000 book purchasers)<sup>54</sup> or view a video on YouTube.com (1.6 percent)<sup>55</sup> actually write a review or comment. This bias can distort the perception of “true” product quality when relying on the average of received comments, since the opinions of the vast majority of purchasers or users go unreported.
36. In addition, there is typically a negativity bias, which is a tendency of people to pay more attention to and give more weight to negative experiences compared to neutral or positive experiences.<sup>56</sup> Research supports the existence of this bias,<sup>57</sup> indicating that negative events or experiences have a stronger impact on behavior than positive events of equal intensity. According to the Nielsen Norman Group, leaders in research-based user experience, this bias is prevalent in the field of user experience.<sup>58</sup> Within the context of consumer comments, negativity bias manifests as consumers expressing and emphasizing negative experiences, opinions, or feedback more prominently than positive ones in their online reviews or comments. This bias can lead to a disproportionate

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<sup>52</sup> Hu, N., Pavlou, P. A., and Zhang, J., “On self-selection biases in online product reviews,” *MIS Quarterly*, 41(2), 2017, 449-475 at pp. 450 and 453.

<sup>53</sup> Hu, N., Pavlou, P. A., and Zhang, J., “On self-selection biases in online product reviews,” *MIS Quarterly*, 41(2), 2017, 449-475 at p. 453.

<sup>54</sup> Levitt, Steven D., “Why Do People Post Reviews on Amazon?” *Freakonomics*, July 22, 2005, <https://freakonomics.com/2005/07/why-do-people-post-reviews-on-amazon/>.

<sup>55</sup> Hu, N., Pavlou, P. A., and Zhang, J., “On self-selection biases in online product reviews,” *MIS Quarterly*, 41(2), 2017, 449-475 at p. 453.

<sup>56</sup> Hood, Christopher, “Credit claiming, blame avoidance, and negativity bias,” in *The Blame Game: Spin, bureaucracy and self-preservation in government*, Princeton University 1-23, 2013, at p. 9. (“Negativity bias denotes a commonly observed cognitive tendency for more attention to be paid to negative than to positive information.”) See also Kahneman, Daniel and Amos Tversky, “Prospect theory: An analysis of decision under risk,” *Econometrica* 47.2, 1979, 263-291. In this seminal paper, Kahneman and Tversky found that negative events or losses have a more profound impact on individuals’ emotional and cognitive responses than positive events or gains of equal magnitude.

<sup>57</sup> Ito, Tiffany A., Jeff T. Larsen, N. Kyle Smith, and John T. Cacioppo, “Negative information weighs more heavily on the brain: the negativity bias in evaluative categorizations,” *Journal of Personality and Social Psychology* 75(4), 1998, 887–900; Schupp, Harald T., Arne Öhman, Markus Junghöfer, Almut I. Weike, Jessica Stockburger, and Alfons O. Hamm, “The facilitated processing of threatening faces: an ERP analysis,” *Emotion* 4(2), 2004, 189–200; Rozin, Paul, and Royzman, Edward B., “Negativity Bias, Negativity Dominance, and Contagion,” *Personality and Social Psychology Review* 5(4), 2001, 296-320.

<sup>58</sup> Loranger, Hoa, “The Negativity Bias in User Experience,” Nielsen Norman Group, October 23, 2016, <https://www.nngroup.com/articles/negativity-bias-ux/>.

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representation of negative sentiments and potentially influence the perception of a product, service, or brand.<sup>59</sup> This bias may be exacerbated by other factors, such as the desire to obtain a refund or obtain other value in compensation.

37. Therefore, when interpreting negative user comments for platforms like Match.com, it is important to recognize both underreporting and negativity biases, since they can exacerbate a perception of the difficulty in the cancellation process and are not representative of overall user experiences, which further undermines the reliability of Dr. King's review of the comments.

## **VIII. DR. KING'S CATEGORIZATION OF COMMENTS IS UNRELIABLE AND LIKELY BIASED**

### **A. The Categorization Summary Tables in Dr. King's Report Lack Replicability and Verifiability**

38. Dr. King categorizes her sample of 638 comments under different thematic categories.<sup>60</sup> Upon examining Dr. King's categorization methodology, it becomes evident that there is no established system in place, making it challenging to replicate her approach. She makes sweeping generalizations without providing specific details about her process, such as the criteria used for categorization, or the iterative steps involved. She states that she "developed an iterative coding scheme by which to categorize the types of comments, which I revised and added to as I reviewed the entire set of 638 entries."<sup>61</sup> However, she does not provide any documentation of a "coding scheme" or include the codes used in her analysis in her report's backup. In effect, her approach appears to be based on her subjective reading of the comments, and not on a systematic approach to classification.
39. Due to a lack of systematic objective criterion behind Dr. King's categorization, many comments appear to be misclassified. Moreover, many of the customer comments appear to be vague and could be interpreted in various ways. Without consistent systematic criteria, Dr. King's classifications reflect her subjective interpretation of the comments.

<sup>59</sup> Loranger, Hoa, "The Negativity Bias in User Experience," Nielsen Norman Group, October 23, 2016, <https://www.nngroup.com/articles/negativity-bias-ux/>.

<sup>60</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, Table 2 and Table 3.

<sup>61</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 25.

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40. This absence of documentation significantly hampers my ability to verify and replicate Dr. King's findings. It also raises concerns about whether her methodology, if applied to the wider population, would yield consistent results with those summarized in her Tables 2 and 3. In fact, while reviewing a few comments and their categorization, I identified a number of instances of apparently subjective and incorrect categorizations based on her stated criteria. For instance, certain comments were labeled as "cancellation confusion" despite the lack of clarity regarding whether customers experienced any actual confusion. These include:

- a. "I would like my membership cancelled."<sup>62</sup>
- b. "member is having a hard time logging in to change AR settings"<sup>63</sup>

41. Similarly, comments that Dr. King classified as "Policy Concern" are not always about policies:

- a. "Cancel my account"<sup>64</sup>
- b. "I had intended to cancel my subscription on January 19th, but submitted the wrong information."<sup>65</sup>

42. Also, members facing difficulties with profile deletion were erroneously categorized under "cancellation confusion" or "unable to cancel."

- a. "i forgot about this and i can seem to remove or delete my ad! why is it so duffcult to remove yourself? match was at all helpful!"<sup>66</sup>
- b. "the agent's emails were very friendly. however, though i don't think it was her fault, match.com could not or would not permanently delete my account, so that i could re-create it without having to use a different email address. with all of the trouble i encountered with re-activating that old account, simply deleting it permanently was, in my opinion, a small request which match.com should have been able to honor. but, i really do appreciate the agent's friendliness in our correspondence. other than this

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<sup>62</sup> King Appendix A, Sheet '2016 categorized', Reference # 160704-001914.

<sup>63</sup> King Appendix A, Sheet '2018 categorized', Reference # 180111-000577.

<sup>64</sup> King Appendix A, Sheet '2016 categorized', Reference # 160816-003161.

<sup>65</sup> King Appendix A, Sheet '2018 categorized', Reference # 180215-002767.

<sup>66</sup> King Appendix A, Sheet '2016 categorized', Reference # 161126-001877.

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trouble, match.com is a good site with useful options. in closing, i would also like to ask that match.com make their site fully accessible to screen reader users (i.e. users who are blind). it's mostly accessible right now (thanks), but if you guys can make it fully accessible, blind people will appreciate it! thanks match.com!”<sup>67</sup>

c. “I want my site taken down. Keep my payment, but take my site down now.”<sup>68</sup>

43. In her analysis of a few dozen FTC complaints,<sup>69</sup> Dr. King includes comments that (1) do not even relate to Match.com or (2) that are not about cancelation at all (e.g., the concern is about account deletion rather than canceling a subscription). These include:

a. “According to their website, Tinder specifically states, You may terminate your account at any time, for any reason, by following the instructions in Settings in the Service;. However, when I follow these instructions, and I select cancel, it says its canceled but still continues to withdraw money...”<sup>70</sup>

b. “I used the service thru June 2018. I tried to find a phone number or email address to POF.com on the POF.com website to cancel my account. I could NOT find one. ...”<sup>71</sup>

c. “I asked them to DELETE my account, they said they HID my account.”<sup>72</sup>

**B. A Significant Share of Commenting Users Were Very Satisfied, Somewhat Satisfied, or Neither Satisfied Nor Dissatisfied**

44. Despite the unrepresentative and potentially biased nature of the data analyzed by Dr. King, a considerable proportion of the commenting users expressed positive or neutral opinions regarding Match.com. Specifically, among the respondents, approximately 22 percent reported being satisfied (either “very satisfied” or “somewhat satisfied”), and

<sup>67</sup> King Appendix A, Sheet ‘2016 categorized’, Reference # 160625-001511.

<sup>68</sup> King Appendix A, Sheet ‘2016 categorized’, Reference # 160623-001707.

<sup>69</sup> Dr. King claims in her Rebuttal Report that she “reviewed roughly fifty complaints from 2016 onward” from the FTC’s Sentinel database (Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 38). However, it is unclear exactly which complaints she reviewed, as her Appendix A contains only about 30 entries in the “FTC Complaints” tab, and the body of her report cites other complaints.

<sup>70</sup> King Appendix A, Sheet ‘FTC Complaints’, Reference # 8750091589162.

<sup>71</sup> King Appendix A, Sheet ‘FTC Complaints’, Reference # 8750091547699. “POF.com” refers to the brand “Plenty of Fish” which I understand is neither owned nor operated by Match Group, LLC.

<sup>72</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 40, quoting Reference # 8750091428628.

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about 9 percent provided a neutral response, indicating neither satisfaction nor dissatisfaction with Match.com.<sup>73</sup>

**IX. MANY OF THE COMMENTERS ANALYZED BY DR. KING DID NOT ACTUALLY EXPERIENCE THE CANCELATION PROCESS OR THEY SUCCESSFULLY CANCELED**

45. Despite Dr. King's reliance on subscriber comments to investigate whether the Match.com "online cancellation flow is simple," Dr. King never attempted to evaluate the actual experience of users who commented. Performing such an analysis shows that the actual experience of many of these subscribers on Match.com is inconsistent with the subscribers' comments and therefore undercuts Dr. King's conclusions that are based on the accuracy of the comments.

46. Match.com provided me with data showing the Match.com activities of subscribers included in Dr. King's comments analysis during the subscriptions in which the comments were left. First, a significant share of the commenting users, **43.2%, did not enter the cancellation process at all**, which undercuts conclusions related to these users about whether the process was simple. These users would not have even seen the password wall that, according to the FTC, begins the cancellation process. Second, of the remaining 56.8% of users that entered the online cancellation process, nearly 90% of them (50.5% of the total commenting users) were able to successfully cancel their Match.com subscriptions. This is inconsistent with concluding that subscribers were unable to cancel due to Match.com's process. In total, the vast majority of commenting users, 93.7%, either did not experience the cancellation process or successfully completed it. These percentages are similar whether looking at all of the comments in Dr. King's analysis or just those chosen in her random sample.

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<sup>73</sup> See workpapers to this report.

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**Table 1**  
**Match.com Activities of Commenting Subscribers**

<b>All Users in Dr. King's Analysis</b>	<b>[A]</b>	<b>[B]</b>	<b>[A] + [B]</b>
	<b>Percent of Comments for which User did not Enter the Resign Flow</b>	<b>Percent of Comments for which User Successfully Resigned</b>	<b>Total</b>
<b>Total Comments</b>			
2067	43.2%	50.5%	93.7%

<b>Users Randomly Selected by Dr. King for Further Analysis</b>			
	<b>Percent of Comments for which User did not Enter the Resign Flow</b>	<b>Percent of Comments for which User Successfully Resigned</b>	<b>Total</b>
<b>Total Comments</b>			
592	42.6%	51.5%	93.7%

Sources: Match Data Files (King\_Appendix\_A.xlsx and MATCHFTC846946)

Notes:

[1] The "Reference" field in Dr. King's Appendix A is used to identify users in the Match data.

[2] Users who did not enter the resign flow did not view the Password Wall, which begins the cancellation process according to the FTC.

[3] Dr. King's Appendix A includes more comments than shown here because; (1) Match.com was not able to find the activity record for all comments and (2) not all comments were associated with a Match.com user ID.

47. Dr. King cites 12 quotes from FTC complaints in the Sentinel database to support her opinion that "Match.com consistently assessed customers unauthorized charges for services they did not desire, charged them after they had canceled or believed they had canceled, and failed to provide adequate customer support to remedy these issues."<sup>74</sup> However, Dr. King merely takes the complaints at face value and presumably assumes that they are an accurate representation of users' experiences with the cancellation flow. Actual usage data, however, is inconsistent with at least some of these complaints, making the complaints an unreliable basis on which to form an opinion. For example, user 207168767 claimed to have attempted cancellation "several months ago,"<sup>75</sup> but their usage history reveals that they entered the cancellation process for the first time only days prior to posting the complaint on the BBB on 9/27/2016—and after their subscription already had renewed.<sup>76</sup> The usage data does not show any attempt to cancel prior to the renewal data, contrary to what the user claimed in the complaint to the BBB. Once the user entered the flow, they were able to cancel within just minutes. Thus, the complaint is inconsistent with actual usage data and undercuts the reliability of her opinion.

<sup>74</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 38.

<sup>75</sup> F01-MG-0028502.xlsx, Originator Reference Number: 8750091388697.

<sup>76</sup> F01-MG-0028502.xlsx, Originator Reference Number: 8750091388697; MATCHFTC846947.

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48. Similarly, Dr. King claims that “[c]ustomers reported a variety of issues relating to the password requirement in cancellation.”<sup>77</sup> But usage data suggests that—contrary to Dr. King’s statement—at least some of these complaints could not have been about the password requirement in the cancellation flow, but instead were about general password resetting issues. For example, user 166089332 wrote to the BBB that “Match.com the website has alot of password reset errors” and that the user had been “locked out of the site for months.” Dr. King uses this complaint to support her opinion that “password reset errors occur at cancellation.”<sup>78</sup> Usage data, however, shows that the user at issue had never visited the cancellation flow prior to the BBB complaint, so the user could not have been complaining about “password reset errors” in the cancellation flow.<sup>79</sup>

## **X. DR. KING’S CONCERNS REGARDING OLDER USERS ARE SPECULATIVE AND INACCURATE**

49. Dr. King appears to be particularly concerned that older users would be unable to complete Match.com’s cancellation process. In her review of the user comments, she states that there are “an unusual number of email addresses that suggested an older aged customer base, most notably emails originating from AOL.com and Hotmail.com [footnote omitted] email services.”<sup>80</sup> Dr. King does not specify what she considers an “unusual” number of email addresses. She does state that 34.6% of customers in the complaints she reviewed had “legacy email service,” by which she appears to mean non-Gmail services that were popular in the early years of the internet with individuals from Generation X (born 1980, today age 42) or older.<sup>81</sup> Dr. King does not specify whether this 34.6% figure is the number she finds unusual, or why she finds it unusual. Dr. King does not provide any basis for why 34.6% of comments coming from “legacy email services” is unusually high. Without concrete support for claims that older users are

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<sup>77</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 41.

<sup>78</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 41.

<sup>79</sup> F01-MG-0028502.xlsx, Originator Reference Number: 8750091369006; MATCHFTC846947.

<sup>80</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 35.

<sup>81</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, pp. 35-36. In reviewing her materials, she specifically appears to mean Yahoo.com, Hotmail.com, AOL.com, and MSN.com as legacy email services.



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overrepresented in the data, her apparent view that this segment has been particularly affected by Match.com's cancellation process is speculative.

50. I reviewed data from the U.S. Census Bureau regarding the age and marital status of individuals in the U.S.<sup>82</sup> The data show that there are approximately 253 million individuals in the U.S. aged 18 or older. Of these individuals, about 126 million were not married with a spouse present (i.e., they were single).<sup>83</sup> Of these single individuals, about 43% were age 45 or higher (i.e. Generation X or older).<sup>84</sup> Thus, older individuals make up a greater proportion of single individuals than legacy email service users do of all email service users in the data Dr. King reviewed. Dr. King states "over 37% of current users [of match.com] are aged 50+,"<sup>85</sup> which does not suggest older individuals account for an "unusual" number of the comments reviewed, since this group accounts for almost 43% of that population according to the Census Bureau.

51. Relatedly, an apparent implication of Dr. King's claims regarding older users is that Match.com targets an older demographic. While data show that Match.com is more popular with older users than mobile-based dating applications like Tinder, the data also show that Match.com users represent a diverse cross-section of ages. For example, a survey in 2018 by Morning Consult asked U.S. individuals about their favorite dating app.<sup>86</sup> Among users who stated a preference other than "None", Match.com was the only service that garnered more than 10% of responses for each age group. It was the most popular service amongst ages 30-44, 45-54, and 55-64, and the third most popular service among ages 18-29 and 65+. In contrast, other services much more clearly target older individuals. For example, only 8% of 18-29 year olds chose eHarmony, while this service was chosen by 25% and 33% of individuals aged 55-64 and 65+, respectively. A "religious based dating app" like Christian Mingle was selected by 4% of respondents

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<sup>82</sup> U.S. Census Bureau, "Table A1. Marital Status of People 15 Years and Over, by Age, Sex, and Personal Earnings: 2021," America's Families and Living Arrangements: 2021, <https://www.census.gov/data/tables/2021/demo/families/cps-2021.html>.

<sup>83</sup> These include married with spouse absent, widowed, divorced, separated, and never married.

<sup>84</sup> See workpapers to this report.

<sup>85</sup> Rebuttal Report of Dr. Jennifer King, May 15, 2023, p. 13.

<sup>86</sup> Morning Consult National Tracking Poll #180111, page 49, <http://www.statista.com/statistics/809450/us-users-favorite-dating-websites-apps-age-group/>.

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aged 18-29 and 5% of those 30-44, but was chosen by 17%, 14%, and 33% of those aged 45-54, 55-64, and 65+, respectively.<sup>87</sup>

52. As a result, Dr. King has no basis for apparently claiming that older individuals were disproportionately harmed by Match.com's cancellation process.

A handwritten signature in black ink, reading "James Langenfeld". The signature is fluid and cursive, with the first name "James" and last name "Langenfeld" clearly legible.

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James Langenfeld, Ph. D.

June 14, 2023

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<sup>87</sup> See workpapers to this report.

# Exhibit 1



**JAMES LANGENFELD**  
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## EDUCATION

Ph.D., WASHINGTON UNIVERSITY, Economics, 1983  
A.B., GEORGETOWN UNIVERSITY, English & Economics, 1971

## PRESENT POSITIONS

Berkeley Research Group, June 2021 – present  
Managing Director

## PROFESSIONAL EXPERIENCE

Ankura, August 2018 – June 2021  
Senior Managing Director

Johns Hopkins University, May 2017 – 2019  
Adjunct Professor

Navigant Economics, July 2010 – August 2018  
Managing Director and Head of Antitrust & Applied Economics

Loyola University Chicago, School of Law, 2002 – 2018  
Adjunct Professor

LECG, LLC, September 1995 – June 2010  
Director

LEXECON INC., January 1994 - August 1995  
Vice President

BUREAU OF ECONOMICS, FEDERAL TRADE COMMISSION, 1988-1993  
Director for Antitrust

BUREAU OF ECONOMICS, FEDERAL TRADE COMMISSION, 1987-1988  
Deputy Director of Economic Policy Analysis, Associate Director for Special Projects

ECONOMICS STAFF, GENERAL MOTORS CORPORATION, 1985-1987  
Senior Economist

COMMISSIONER, FEDERAL TRADE COMMISSION, 1984-1985  
Economic Advisor

BUREAUS OF COMPETITION AND CONSUMER PROTECTION,  
FEDERAL TRADE COMMISSION, 1982-1984  
Assistant to the Director

BUREAU OF ECONOMICS, FEDERAL TRADE COMMISSION, 1979-1982  
Economist

UNIVERSITY OF MISSOURI, St. Louis, MO, 1978-1979  
Instructor

CONFERENCE ON EDUCATION, 1977  
Consultant

CENTER FOR THE STUDY OF AMERICAN BUSINESS, ECONOMICS DEPT.,  
WASHINGTON UNIVERSITY, 1973-1977  
Researcher



UNIVERSITY COLLEGE, WASHINGTON UNIVERSITY, 1974-1976

Instructor

SECTION OF MARKET DEVELOPMENT, AMTRAK, 1972-1973

Statistical Analyst

BUREAU OF ECONOMICS, INTERSTATE COMMERCE COMMISSION, 1971-1972

Economist

## REFeree

*Antitrust Bulletin*

*Antitrust Law Journal*

*Economic Inquiry*

*Global Competition Review*

*International Journal of the Economics of Business*

*Journal of Industrial Economics*

*Review of Industrial Organization*

*Stanford Journal of Complex Litigation*

## PROFESSIONAL ACTIVITIES

Co-Chair, ABA Section of Antitrust Law's Economics Committee

Advisory Board, American Antitrust Institute

Advisory Board, The Capitol Forum

American Economic Association

Editorial Board, *International Journal of the Economics of Business*

Editor-in-Chief, *Research in Law and Economics*

Liaison, American Bar Association Section of Litigation, Class Actions and Derivative Suits Committee

Member, American Bar Association Antitrust, Healthcare, Intellectual Property and Litigation Sections

U.S. Advisory Board, Institute for Consumer Antitrust Studies

## AWARDS

Washington University in St. Louis Distinguished Alumni Award, 2018

Adolph G. Abramson Scroll for an outstanding article in *Business Economics*, 2005

Listed in Global Competition Review's *The Handbook of Competition Economists*, 2005-2018 and the Economist section of *An International Who's Who of Competition Lawyers*, 1997-2018

Honoree, Celebration of the Twentieth Anniversary of the 1982 Merger Guidelines, Department of Justice, June 10, 2002

FTC Distinguished Service Award, 1993

SES Meritorious Service Award, 1992

## DISSERTATION

Federal Automobile Regulations, 1983



## PAPERS AND PUBLICATIONS

- 1) "The Economics of Class Certification: Olean Wholesale Grocery v. Bumble Bee Foods," with Chris Ring Langenfeld, prepared for the American Bar Association Antitrust Section's 2023 Spring Meeting, February 2, 2023.
- 2) "United States - Economist's Perspective: Class actions – litigation, policy and latest developments," with Robin Cantor, Jeffrey Klenk, and Chris Ring, *Global Competition Review*, December 2, 2022.
- 3) "The Economics of Class Certification: Olean Wholesale Grocery v. Bumble Bee Foods (with Christopher Ring), American Bar Association Antitrust Law Section, Economics Committee Newsletter, November 3, 2022. Available at [https://www.americanbar.org/groups/antitrust\\_law/resources/newsletters/economics-class-certification-olean-v-bumble-bee/](https://www.americanbar.org/groups/antitrust_law/resources/newsletters/economics-class-certification-olean-v-bumble-bee/).
- 4) "The American Innovation and Choice Online Act (S.2992): Insights from Economics Regarding Self-Preferencing and Non-Discrimination" (with Christopher Ring and Lucia Castiblanco), American Bar Association Antitrust Law Section, Economics Committee Newsletter, March 23, 2022. Available at [https://www.americanbar.org/groups/antitrust\\_law/publications/newsletters/american-innovation-choice-online-act/](https://www.americanbar.org/groups/antitrust_law/publications/newsletters/american-innovation-choice-online-act/).
- 5) "With Big Tech Bracing for Antitrust Legislation, Here's What You Need to Know about the Economics of Digital Platforms" (with Chris Ring), *ThinkSet*, March 2, 2022, <https://thinksetmag.com/insights/ts-big-tech-antitrust-legislation-digital>.
- 6) "A Step Forward or Backward: The Court's Application of Geographic Market Definition Principles in *FTC et al. v. Thomas Jefferson University and Albert Einstein Healthcare*", (with David Eisenstadt), *CPI Antitrust Chronicle*, May 11, 2021. Available at <https://www.competitionpolicyinternational.com/a-step-forward-or-backward-the-courts-application-of-geographic-market-definition-principles-in-ftc-et-al-v-thomas-jefferson-university-and-albert-einstein-healthcare/>.
- 7) "Regulating digital platforms: interoperability and data portability" (with Chris Ring and Samuel Clark), The New US Antitrust Administration, *Concurrences*, January 2021, 44-51. Available at <https://www.concurrences.com/fr/revue/issues/no-1-2021/dossier/the-new-us-antitrust-administration>.
- 8) "Analysis of Literature on Technology and Alternative Workforce Arrangements", prepared for the Coalition for Workforce Innovation, filed with comments to the U.S. Department of Labor, Wage and Hour Division, regarding independent contractor status under the Fair Labor Standards Act: Notice of Proposed Rulemaking and Request for Comments, October 26, 2020.
- 9) "Price Gouging in the Time of COVID-19 (with Chris Ring and Luke Gelber), *ABA Economics Committee Newsletter*, Summer 2020, 1-7.
- 10) "How COVID-19 Applies To Weakened Competitor M&A Defense (with Chris Ring), *Law360* June 2, 2020. Available at <https://www.law360.com/articles/1278639/how-covid-19-applies-to-weakened-competitor-m-a-defense>
- 11) "Prevention or Cure? Damages in Private Antitrust Claims in the US and the EU", *Global Competition Litigation Review*, Volume 13, January 1, 2020.
- 12) "Does Crime Pay? Cartel Fines and Damages", *ABA Economics Committee Newsletter*, Vol 19, No. 2, Spring 2018, 41-46.
- 13) "Reply to Connor and Lande on Cartel Overcharges", *International Journal of the Economics of Business*, Vol. 24, Iss. 3, September 19, 2017, 339-343.
- 14) "The Empirical Basis for Antitrust: Cartels, Mergers, and Remedies", *International Journal of the Economics of Business*, Vol. 24, Iss. 2, January 27, 2017, 233-250.
- 15) "The Need to Revise the U.S. Non-Horizontal Merger Guidelines", *Concurrences*, **App. 289**

- 4, 2016, 51-58. Available at <http://ssrn.com/abstract=2877780>.
- 16) *Antitrust Law and Economics of Product Distribution*, 2<sup>nd</sup> ed. (ALEPD 2<sup>nd</sup>), co-editor (with Quentin Wittrock and Theodore Banks), American Bar Association, 2016.
  - 17) “Economics Tools Used in Merger Control,” 7<sup>th</sup> ed. (with S Murthy Kambhampaty), *The Merger Control Review*, Law Business Research, July 2016, 10-29.
  - 18) “Hicks-Marshall Conditions and Defining Antitrust Markets for Intermediate Goods,” (with Jonathan T. Tomlin, David A. Weiskopf and Georgi Giozov), *Research in Law and Economics*, Vol. 27, November 23, 2015, 67-90.
  - 19) “Bayer or Walgreen’s? The Relationship of Premium and Value Brands in the United States,” (with Wenqing Li and Sophie Yang), in *Brands, Competition Law and IP*, Deven Desai, Ioannis Lianos and Spencer Waller (eds.), 2015, 25-47.
  - 20) “Economics Tools Used in Merger Control,” 6<sup>th</sup> ed. (with S Murthy Kambhampaty), *The Merger Control Review*, Law Business Research, July 2015, 3-19.
  - 21) “The Role of the Economic Expert in Damages Analyses,” (with Robert Kneuper), *Expert Witnesses*, American Bar Association Section of Litigation, October 6, 2014.
  - 22) “Antitrust Economics: Analysis of Alleged Illegal Tying,” (with Raleigh Richards), *The Colorado Lawyer*, Vol. 43, No. 10, October 2014, 27-32.
  - 23) “Asymmetric Price Increase in Critical Loss Analysis: Surreply to Daljord, Sørsgard, and Thomassen,” (with Wenqing Li), *Journal of Competition Law & Economics*, Vol. 10, No. 3, August 2014, 769-772.
  - 24) “The Role of Economics in Truncated Rule of Reason Analysis,” (with David Eisenstadt), *Antitrust*, Vol. 28, No. 3, July 2014.
  - 25) “Experts and Expert Depositions in Class Actions,” (with Daniel Barsky), *Class Actions & Derivative Suits*, American Bar Association Section of Litigation, June 3, 2014.
  - 26) “The Law and Economics of Class Actions: Yesterday, Today, and Tomorrow,” (with Raleigh Richards), *Research in Law and Economics*, Vol. 26, May 2014, 1-9. Also appears in *Economic Perspectives on Today’s Business Challenges*, May 2014, 33-39.
  - 27) “*FTC v. Actavis*: Courts Bring Economics Back to Reverse Payment Cases,” (with Sophie Yang), *Economic Perspectives on Today’s Business Challenges*, May 2014, 40-43.
  - 28) “Chapter 12: Using Econometrics to Estimate Damages,” (with Wenqing Li, Greg Leonard, and John Morris), in *Econometrics: Legal, Practical and Technical Issues*, Charles Biggio and Lawrence Wu (eds.), ABA Section of Antitrust Law, 2<sup>nd</sup> ed., March 2014.
  - 29) “Asymmetric Price Increase in Critical Loss Analysis: A Reply to Daljord, Sørsgard, and Thomassen,” (with Wenqing Li), *Journal of Competition Law & Economics*, Vol. 10, No. 2, February 2014, 495-503.
  - 30) “Evaluating the Size of ‘Reverse Payments’ in Light of the Supreme Court’s Decision in *FTC v. Actavis*,” *Competition Policy International Antitrust Chronicle*, Vol. 2, September 2013.
  - 31) “State Aid and Supply-Side Geographic Market Definition” (with Christopher Alexander), *European State Aid Law Quarterly*, Vol. 2, 2013, 362-370.
  - 32) “Commissioner Joshua Wright on Dynamic Competition and Innovation,” *Antitrust Source* 12, No. 4, April 2013, 78-82.
  - 33) “Overview of Antitrust Economics in the United States,” (with Stephan Levy), *The Handbook of Competition Economics*, 2013, 121-123.
  - 34) “Economic Analysis of Allegations in Cigarette Litigations and the Impact of FTC Regulation,” (with Brad Noffske), *Research in Law and Economics*, Vol. 25, 2013, 129- 233.
  - 35) “Chapter 8: Economic Experts,” (with Gregory G. Wrobel and Michael J. Waters), in *Private Enforcement of Antitrust Law in the United States*, ed. Albert A. Foer, et al. (Northampton, MA: Edward Elgar, 2012), 395-443.
  - 36) Review of *Market Power Handbook: Law and Economic Foundations*, 2<sup>nd</sup> edition,



- ABA Section of Antitrust Law, *Word Competition Law and Economics Review*, Vol. 35, No. 4, December 2012, 711-713.
- 37) "Chapter 2: Manufacturing Input Markets," (with William Nye, Louis Silvia, and Jonathan Tomlin) in ABA Section of Antitrust Law, *Market Definition in Antitrust: Theory and Case Studies*, 2012, 49-89.
  - 38) "Overview of Antitrust Economics in the United States," (with Stephan Levy), *The Handbook of Competition Economics*, 2012, 115-116.
  - 39) "The Potential Role of Civil Antitrust Damage Analysis in Determining Financial Penalties in Criminal Antitrust Cases," (with Robert Kneuper), *George Mason Law Review*, Vol. 18, No. 4, Summer 2011, 953-986.
  - 40) "Troubleshooting ACO Antitrust Enforcement," *Law360*, (with Tracey Klein), August 22, 2011. Available at <http://www.law360.com/articles/263798/troubleshooting-aco-antitrust-enforcement>
  - 41) "*Daubert* and Other Gatekeeping Challenges of Antitrust Experts: Appendix," (with Christopher Alexander), *Antitrust Source* 10, No. 6, August 2011, 21-28.
  - 42) "*Daubert* and Other Gatekeeping Challenges of Antitrust Experts," (with Christopher Alexander) *Antitrust* 25, No. 3, Summer 2011, 21-28.
  - 43) "Comment regarding the Proposed Policy Statement regarding Accountable Care Organizations (ACOs) participating in the Medicare Shared Savings Program (MSSP)," (with Tracey Klein), May 31, 2011.
  - 44) "Upward Pricing Pressure Analysis Under the 2010 Horizontal Merger Guidelines," *Antitrust* 25, Fall 2010, No. 1, 21-27.
  - 45) "2010 Horizontal Merger Guidelines: Changes in Policy, Transparency, & Predictability," *CPI Antitrust Chronicle* 2, October 28, 2010. Available at <https://www.competitionpolicyinternational.com/2010-horizontal-merger-guidelines-changes-in-policy-transparency-predictability/>
  - 46) "Chapter 6: Econometrics and Regression Analysis," (with Wenqing Li, Greg Leonard and John Morris), *Proving Antitrust Damages: Legal and Economic Issues*, ABA Section of Antitrust Law, 2<sup>nd</sup> ed., 2010.
  - 47) "Daubert and Other Gatekeeping Challenges of Antitrust Economists," (with Chris Alexander), AAI Working Paper #08-06, March 10, 2010. Available at <http://ssrn.com/abstract=1337081>
  - 48) "Revising the Merger Guidelines," *GCP*, Release 1, December 2009.
  - 49) "Is GM the New Amtrak?" *The Daily Beast*, June 5, 2009. Available at <http://www.thedailybeast.com/blogs-and-stories/2009-06-05/is-gm-the-new-amtrak/>
  - 50) "Non-Horizontal Merger Guidelines in the United States and the European Commission: Time for The United States to Catch Up?," *George Mason Law Review*, Vol. 16, No. 4, Summer 2009, 851-884.
  - 51) "Needed Revisions of the Non-Horizontal Merger Guidelines," *The Threshold*, Vol. 9, No. 2, Spring 2009, 30-39.
  - 52) "Supplemental LECG Report Regarding Proposed Highmark/IBC Consolidation," (with Rob Kneuper), January 30, 2009. Available at <http://www.ins.state.pa.us/ins/lib/ins/highmark-ibc/1768.pdf>
  - 53) "LECG Report to the Pennsylvania Insurance Department Regarding Proposed Highmark/IBC Consolidation" (with Robert Kneuper), September 10, 2008. Available at <http://www.ins.state.pa.us/ins/lib/ins/highmark-ibc/1355.pdf>
  - 54) "The Potential Impact of *Twombly* on Antitrust Class Actions," (with Wendy Bloom) *GCP*, Release 2, June 2008.
  - 55) "Natural Experiments," (with Mary Coleman), *Issues in Competition Law and Policy*, ABA Section of Antitrust Law, Vol. 1, 2008, 743-772.

- 56) "Price Discrimination and the Cruise Line Industry: Implications for Market Definition, Competition, and Consumer Welfare," (with Wenqing Li), *International Journal of the Economics of Business*, Vol. 15, Issue 1, February 2008, 1-25.
- 57) "Q&A: James Langenfeld on Using Econometrics to Estimate Damages," *LECG Library*, January 2008.
- 58) "The Future of US Federal Antitrust Enforcement: Learning From Past and Current Influences," (with Daniel R. Shulman), *The Sedona Conference Journal*, Vol. 8, Fall 2007, 1-15.
- 59) "Refining the *Matsushita* Standard and The Role Economics Can Play", (with James Morsch), *Loyola University Chicago Law Journal*, Vol. 38, No. 3, Spring 2007, 507-512.
- 60) "The Economics of High Tech Antitrust," (with Anne Layne-Farrar and Jorge Padilla), *Global Competition Review*, Vol. 10, Issue 4, April 2007, 35-38.
- 61) "Book review of Michael Whinston's *Lectures on Antitrust Economics*," *World Competition Law and Economics Review*, Vol. 30, March 2007, 174-175.
- 62) "The FTC's Study of Pharmacy Benefits Managers," (with Robert Maness), *Antitrust Health Care Chronicle*, Vol. 19, No. 4, January 2006, 23-29.
- 63) "The Benefits of Free Trade to U.S. Consumers," (with James Nieberding), *Business Economics*, Vol. 40, July 2005, 41-51.
- 64) "Economic Analyses of Patent Settlement Agreements: The Implementation of Specific Economic Tests, the Evaluation of Dynamic Efficiency, and the Scope of Patent Rights," (with Wenqing Li), *University of San Francisco Law Review*, Vol. 39, Issue 1, Fall 2004, 57-80.
- 65) "Federal Trade Commission Horizontal Restraint Cases: An Update," (with Louis Silvia), *The Antitrust Bulletin*, Vol. XLIX, No.3, Fall 2004, 521-591.
- 66) "How the 'Other Half' Lives: FTC Non-Merger Antitrust Enforcement," *The Antitrust Bulletin*, Vol. XLIX, No. 3, Fall 2004, 457-469.
- 67) "Competition, Consumer Awareness, and Distribution in the Contact Lens Industry," (with Robert Maness), June 24, 2004.
- 68) "Elzinga-Hogarty Tests and Alternative Approaches for Market Share Calculations in Hospital Markets," (with H.E. Frech III and R. Forrest McCluer), *Antitrust Law Journal*, Vol. 71, No. 3, 2004, 921-947.
- 69) "The Cost of PBM "Self-Dealing" Under a Medicare Prescription Drug Benefit," (with Robert Maness), September 2003.
- 70) "Economic Literature on Price Discrimination and its Application to the Uniform Pricing of Gasoline," (with Wenqing Li and George Schink), *International Journal of the Economics of Business*, Vol. 10, No. 2, July 2003, 179-193.
- 71) "Intellectual Property and Agreements to Settle Patent Disputes: The Case of Partial Settlement Agreement with Payments from Branded to Generic Drug Manufacturers," (with Wenqing Li), *Antitrust Law Journal*, Vol. 70, Issue 3, Spring 2003, 777-818.
- 72) "The Impact of Increases in Health Costs on Employment-Based Health Spending, the Number of Uninsured, Employment, and Wages for the United States and Each State 20003 – 2007," (with Richard Shin), prepared for the American Association of Health Plans, January 13, 2003.



- 73) "Oregon's Measure 23 Could Increase State Health Care Expenditures by 30% in 2005," (with Richard Shin), prepared for the American Association of Health Plans, October 9, 2002.
- 74) "Estimates of Private Employment-Based Insurance Spending In the United States and by State (and the District of Columbia) 2003-2007," (with Richard Shin), prepared for the American Association of Health Plans, September 24, 2002.
- 75) "Intellectual Property and Antitrust: Steps Toward Striking a Balance," *Case Western Reserve Law Review*, Vol. 52, No. 1, Fall 2001, 91-110.
- 76) "The Perfect Caper? Private Damages and The Microsoft Case," *The George Washington Law Review*, Vol. 69, No. 5/6, October/December 2001, 902-914.
- 77) "Oil Pipelines' Effects on Refined Products Prices," (with Mary Coleman and George Schink), presented Federal Trade Commission conference, *Factors that Affect Prices of Refined Petroleum Products*, August 2, 2001.
- 78) "The Use and Misuse of Critical Loss Analysis," (with Wenqing Li), *LECG Perspectives*, Vol. 2, No. 3, July 2001.
- 79) "Critical Loss Analysis in Evaluating Mergers," (with Wenqing Li), *Antitrust Bulletin*, Summer 2001, 299-337.
- 80) "Has Microsoft Committed the Perfect Caper?" (with Robert H. Lande), *FTC Watch*, No. 564, April 16, 2001, 11-13.
- 81) "Skepticism Overdone: Managed Care and Costs," (with H.E. Frech III), *Health Affairs*, November/December 2000, Vol. 19, No. 6, 305.
- 82) "Challenges to Managed Care Practices in Healthcare And Their Potential Effects," (with Michaelyn Corbett), *LECG Perspectives*, Vol. 1, No. 4, October 2000, 1-4.
- 83) "The Economics of Geographic Market Definition in the Sutter Health/Summit Merger," (with Wenqing Li), *Antitrust Health Care Chronicle*, Vol. 14, No. 3, Fall 2000, 11-12.
- 84) "Competition in U.S. Healthcare and Its Future," (with Michaelyn Corbett), *Global Competition Review*, Vol. 3, No. 4, August-September 2000, 29-30.
- 85) "Lost Profits from Patent Infringement: The Simulation Approach," (with Gregory J. Werden and Luke M. Froeb), *International Journal of the Economics of Business*, Vol. 7, No. 2, 2000, 213-227.
- 86) "The Impact of Antitrust Exemptions for Health Care Professionals on Health Care Costs," (with H.E. Frech III), Monograph, Prepared for the American Association of Health Plans, June 2000.
- 87) "Quantitative Techniques in Competition Analysis," (with Tom Hoehn, Melori Meschi and Len Waverman), *Global Competition Review*, Vol. 2, No. 5, October-November 1999, 27-28.
- 88) "Quantitative Techniques in Competition Analysis," (with Tom Hoehn, Melori Meschi and Len Waverman), prepared for the U.K. Office of Fair Trading, October 1999.
- 89) "Recent Trends in Merger Enforcement in the United States: The Increasing Impact of Economic Analysis," (with Robert H. Lande), *Comparative Law*, Vol. 15, 1998, 73-96.
- 90) "The Use of Customer Complaints in Antitrust Analysis," *Government Antitrust Litigation Advisory*, July 1998, 1-5.
- 91) "Antitrust Analysis and Remedies in High-Tech Industries," (with Mary Coleman), *Global Competition Review*, Vol. 1, No. 3, June/July 1998, 42-43.

- 92) ABA Antitrust Section, 1997 *Annual Review of Antitrust Law Developments* (1998) (Contributor).
- 93) "Programming Concerns in German Pay-TV," (with Steve Wildman and William Wagener), *The Global Competition Review*, Vol. 1, No. 2, April/May 1998, 47.
- 94) "The Triumph and Failure of the U.S. Merger Guidelines in Litigation," *The Global Competition Review*, Issue 1, December 1997/January 1998, 36-37.
- 95) "Cash Machines: Fee Disclosure and Competition v. Regulation," (with Alan Frankel), *The Global Competition Review*, August/September 1997, 31-32.
- 96) "Sea-Change or Submarkets? Federal Trade Commission v. Staples, Inc. and Office Depot, Inc.," (with Alan Frankel), *The Global Competition Review*, June/July 1997, 29-30.
- 97) "Antitrust and Intellectual Property: Landing on Patent Avenue in the Game of Monopoly," (with James Gould), *IDEA - The Journal of Law and Technology*, Vol. 37, No. 3, 1997, 449-89.
- 98) "From Surrogates to Stories: The Evolution of Federal Merger Policy," (with Robert Lande), *Antitrust*, Vol. 37, No. 3, Spring 1997, 5-9.
- 99) "The Merger Guidelines As Applied," in Malcolm Coate and Andrew Kleit (eds.), *The Economics of the Antitrust Process*, 1996, 41-64.
- 100) *Proving Antitrust Damages*, Section of Antitrust Law, American Bar Association, William Page (ed.), (co-author), 1996, 41-64.
- 101) "Antitrust and Agreements Among Health Care Providers: 'The Messenger Model,' Efficiencies, and Non-Exclusive Contracts," (with Richard Higgins), Southern Economic Association Meetings, New Orleans, LA, November 19, 1995.
- 102) "Competition Policy and Privatization During the Transition of Central and Eastern Europe to a Market Economy: An Organizational Perspective," (with Dennis Yao), in H. Thomas, D. O'Neal and J. Kelly (eds.), *Strategic Renaissance and Business Transformation*, 1995, 33-55.
- 103) "Competition Policy and Privatization in a Transition Economy: An Organizational Perspective," (with Dennis Yao), in H.J. Blommestein and B. Steunenberg (eds.) *Government and Markets*, 1994, 195-218.
- 104) "Economic Theories of the Potential Anticompetitive Impact of Physician Owned Joint Ventures," (with Michael Black), *Antitrust Bulletin*, Summer 1994, 385-414.
- 105) "Entry Under the Merger Guidelines, 1982-1992," (with Malcolm Coate), *Antitrust Bulletin*, Fall 1993, 557-592.
- 106) "The Federal Trade Commission's Horizontal Restraint Cases: An Economic Perspective," (with Louis Silvia), *Antitrust Law Journal*, Spring 1993, 653-697.
- 107) "Frontiers in Monopolization," (with Michael Black), in John Clark and Mary Lou Steptoe (eds.), *The Antitrust Division and the FTC Speak on Current Developments in Federal Antitrust Enforcement*, 1992 (New York: Practising Law Institute), Chapter 26, 647-662.
- 108) "Efficiencies in U.S. Merger Analysis," (with Timothy Deyak), *International Merger Law*, No. 25, September 1992.
- 109) "Chapter 19: Analysis of Nonprice Horizontal Restraints," (with Louis Silvia and Terry Winslow), in Von Kalinowski (ed.), *Antitrust Counseling and Litigation Techniques*, (New York: Matthew Bender, 1992), 19-1 – 19-57.
- 110) "Liberal Trade and Antitrust in Developing Nations," (with Roger Boner), *Regulation*, Spring 1992, 5-6.
- 111) "Hospital Mergers: Do U.S. Antitrust Agencies Follow the Government Guidelines?" (with Paul Pautler), *International Merger Law*, February 1992.
- 112) "Analyzing Agreements Among Competitors: What Does the Future Hold?" (with John Morris), *Antitrust Bulletin*, Fall 1991, 651-679.
- 113) "Is Competition Policy the Last Thing Central and Eastern Europe Need?" (with **Appa** **294**



- Blitzer), *American University Journal of International Law and Policy*, Vol. 6, No. 3, Spring 1991, 347-398.
- 114) "In Defense of Antitrust" (with John Morris), *Regulation*, Spring 1991, 2-4.
  - 115) "Antitrust Enforcement: The Gray Area of Agreements Among Competitors," *ATRS Report*, Spring 1991, 3-20.
  - 116) "Economic Analysis in Health Care Antitrust," (with M. Vita, P. Pautler, and L. Miller), *The Journal of Contemporary Health Law and Policy*, Vol. 7, Spring 1991, 73-116.
  - 117) "The FTC in the 1980's," (with David Scheffman), *Industrial Organization Review*, Summer 1990, 79-98.
  - 118) "Comment on Baker, 'Identifying Cartel Policing Under Short-Term Uncertainty'," *Journal of Law and Economics*, Vol. 32, No. 2, October 1989, S77-S82.
  - 119) "Innovation and U.S. Competition Policy," (with David Scheffman), *Antitrust Bulletin*, Spring 1989, 1-63. Also published in *Aussenwirtschaft*, 43, Jahrgang 1988, 45-95.
  - 120) "The Use of Customer Complaints in Antitrust Analysis," (with Steve Stockum), *ATRS Report*, Spring 1989, 3-13.
  - 121) "Regulatory Reform: the Right Way and the Wrong Way," (with Thomas Walton), in Roger Meiners and Bruce Yandle (eds.), *Regulation and the Reagan Era: Politics, Bureaucracy and the Public Interest*, 1989, 41-71.
  - 122) "Attorney Advertising and Competition at the Bar," (with Terry Calvani and Gordon Shuford), *Vanderbilt Law Review*, Vol. 41, May 1988, 761-788.
  - 123) "How Can Guidelines Reduce the Uncertainties of Antitrust Enforcement?," *Antitrust Bulletin*, Fall 1987, 643-659.
  - 124) "Settlement vs. Litigation in Antitrust Enforcement," (with Robert Rogowsky), in Mackay, Miller, and Yandle (eds.), *The Federal Trade Commission: The Political Economy of Regulation*, 1987, 205-219.
  - 125) "Evolution or Revolution--What is the Future of Antitrust?" (with David Scheffman), *Antitrust Bulletin*, Summer 1986, 287-300.
  - 126) "The Impact of Antitrust Guidelines on Business," *Contemporary Policy Issues*, July 1986, 22-29.
  - 127) "The Effect of Warranties: A Comment," in Ippolito and Scheffman (eds.), *Empirical Approaches to Consumer Protection Economics* (Washington, D.C.: F.T.C., 1986), 105-107.
  - 128) "CAFE Estimation Errors and Their Causes," (with Richard Schneider), presented at the Western Economic Association Meetings, San Francisco, July 1986.
  - 129) "Financial Deregulation and Geographic Market Delineation: An Application of the Justice Guidelines to Banking," (with Joseph McKenzie), *Antitrust Bulletin*, Fall 1985, 695-712.
  - 130) "An Overview of the Current Debate on Resale Price Maintenance," (with Terry Calvani), *Contemporary Policy Issues*, Spring 1985, 1-8.
  - 131) "The Failing Industry Merger Defense: A Market Alternative to MITI," presented at the Southern Economic Association Meetings in Atlanta, Georgia, November 1984.
  - 132) "Antitrust Enforcement and the Oil Industry: Mergers in an Industry of Giants," presented at the National Association of Attorneys General Oil Merger Seminar, Denver, Colorado, April 24-25, 1984.
  - 133) "An Economic Analysis of the Law of Evidence Applied to the Subjective and Objective tests in an Entrapment Defense," (with Richard Higgins), presented at the International Atlantic Economic Conference in San Juan, Puerto Rico, March 1984.
  - 134) "The Costs and Benefits of Automobile Emissions Controls and Safety Regulations," Working Paper of the Center for the Study of American Business, Washington University in St. Louis, October 1983, Revised January 1984.
  - 135) "Federal Automobile Regulations," presented at the Industrial Organization Society Meetings in San Francisco, California, December 1983.
  - 136) "Comment of the Staff of the F.T.C. on Certain Motor Vehicle and Certain Chassis and



- Bodies Therefore, before the U.S. International Trade Commission, TA-201-44," (co-authored), October 1980.
- 137) "Demand Effects of Automobile Regulations," presented at the Econometric Society Meetings in Atlanta, Georgia, December 1979.
  - 138) "The New Wave of Regulation: An Appraisal," *The Alternative: An American Spectator*, March 1976.
  - 139) "Motor Carriers of Passengers," ICC Annual Report to Congress, 1972.
  - 140) "Empirical Findings on Self Esteem: A Selected Survey," Appendix to P.S.L. Office of Education contract, 1971.
  - 141) Assisted Murray L. Weidenbaum on Government Mandated Price Increases (AEI: 1975), "Private Advisors and Government Policymaking," *Policy Analysis*, Winter 1975, and "The Advantages of Credit on the Personal Income Tax," *George Washington Law Review*, March 1974.

While at the FTC, contributed to the U.S. Department of Justice and Federal Trade Commission 1992 Horizontal Merger Guidelines and the 1993 Statements of Enforcement Policy Relating to Health Care and Antitrust.



## RECENT EXPERT TESTIMONIAL AND RELATED EXPERIENCE

Dr. Langenfeld has made many presentations and submitted reports to the Federal Trade Commission, the Department of Justice, various state agencies such as the Pennsylvania Insurance Department, the Department of Defense, the European Commission, and the Canadian Bureau of Competition Policy since leaving the FTC. These presentations involved a number of industries, including petroleum, healthcare, pharmaceuticals, medical devices, insurance, chemicals, construction equipment, computers, communications, defense, aerospace, food processing, baking, automobiles and trucks, and a large variety of consumer and industrial products. They covered economic analyses of mergers, monopolistic practices, collusion, consumer protection, and government regulation. He also often presents at conferences and seminars, covering a wide variety of economic, policy, damages, and strategic planning topics.

In addition to these presentations, Dr. Langenfeld has extensive experience testifying in federal and state courts, as well as before the European Commission. This formal testimonial and related experience covers antitrust, damages, class certification, intellectual property relating to patents and trade secrets, taxation regulation, and economic policy. Dr. Langenfeld's testimonial experience includes the following matters:

- 1) Deposition of James Langenfeld, Ph.D in Intermodal Motor Carriers Conference, American Trucking Associations, Inc., v. Ocean Carrier Equipment Management Association, Inc., et al., Docket No. 20-14, United States Federal Maritime Commission, April 1, 2022.
- 2) Testimony of James Langenfeld, Ph.D in Bellin Memorial Hospital, INC., v. Kinsey & Kinsey, Inc., Brad Kinsey, and Brian M. Thome, Case No. 18-cv-348, State of Wisconsin Circuit Court Brown County, November 16, 2021.
- 3) Deposition of James Langenfeld, Ph.D in Honey Bum, LLC, v. Fashion Nova, INC., Richard D. Saghian, Case No.: 20-CV-11233, in the United States District Court of the Central District of California Western Division – Los Angeles, November 3, 2021.
- 4) Deposition of James Langenfeld, Ph.D. in Emergency Services of Oklahoma, PC, Oklahoma Emergency Services, PC, Emergency Physicians of Mid-America P.C., and South Central Emergency Services, PC, v. Aenta Health Inc., Aenta Health Insurance Company, and Aetna Life Insurance Company, Case No. 5:17-cv-00600-PRW, in the United States District Court for the Wester District of Oklahoma, October 14, 2021.
- 5) Arbitration Testimony of James Langenfeld, Ph. D. in US Worldmeds, LLC., v. Piramal Pharma Solutions, INC., Case No. 01-20-0000-5191, American Arbitration Association, May 11-12, 2021.
- 6) Deposition of James Langenfeld, Ph.D. in US Worldmeds, LLC v. Piramal Pharma Solitons, INC., Case No. 01-20-0000-5191, American Arbitration Association, March 12, 2021.
- 7) Deposition of James Langenfeld, Ph.D. in Bellin Memorial Hospital, INC., v. Kinsey & Kinsey, Inc., Brad Kinsey, and Brian M. Thome., Case No. 18-cv-348, State of Wisconsin Circuit Court Brown County, September 21, 2020.
- 8) Trial Testimony of James Langenfeld, Ph.D. in Ashraf O. Hamideh, an individual, Pouya Abdolrasoul, an individual, all in their representative capacity on behalf of themselves and other current and former employees, Plaintiffs vs. Wells Fargo Bank, N.A., Case No. 37-2017-00045253-CU-OE-CTL, in the Superior Court of the State of California County of San Diego, February 20, 2020.



- 9) Deposition of James Langenfeld, Ph.D. in re Bearings Cases, Case No. 12-MD-02311, in the United States District Court, Eastern District of Michigan, Southern Division, November 15, 2019.
- 10) Deposition of James Langenfeld Ph.D in Barbara Ruotolo, Edward Williams, and Chris Kalhoon, v. Lyft, Inc., Case Nos. AAA 01-18-0003-9788, 01-18-0003-9792, 01-18-0003-9782, American Arbitration Association, August 22, 2019.



**Exhibit 2**  
**Materials Considered**

<b>Legal Documents</b>	
Expert Report of Brandon Ward Regarding Match.com's Online Subscription Cancellation Flow, January 13, 2023	
Expert Report of Dr. Jennifer King, January 13, 2023	
First Amended Complaint for Permanent Injunction, Monetary Relief, Civil Penalties, and Other Relief, Case No. 3:19-cv-02281, July 18, 2022.	
Plaintiff's Second Amended Initial Disclosure, May 19, 2023	
Plaintiff's Third Amended Responses to Defendants' First Set of Interrogatories, May 19, 2023	
Plaintiff's Third Amended Responses to Defendants' First Set of Interrogatories, November 29, 2022	
Rebuttal of Dr. King's Report Regarding Match.com's Online Subscription Cancellation Flow, May 15, 2023	
Rebuttal Report of Dr. Jennifer King, May 15, 2023	
<b>Public Materials</b>	
American Economic Association, "What is economics?" <a href="https://www.aeaweb.org/resources/students/what-is-economics">https://www.aeaweb.org/resources/students/what-is-economics</a> . Dwivedi, D.N., "Microeconomics: Theory & Applications," 2006	
Department of Health and Human Services, RAT-STATS 2010 User Guide, Version 1, <a href="https://oig.hhs.gov/documents/rat-stats/835/UserGuide2010_04js.pdf">https://oig.hhs.gov/documents/rat-stats/835/UserGuide2010_04js.pdf</a>	
Federal Register, Vol. 88, No. 78, April 24, 2023, pp. 24716-24739, <a href="https://www.federalregister.gov/documents/2023/04/24/2023-07035/negative-option-rule">https://www.federalregister.gov/documents/2023/04/24/2023-07035/negative-option-rule</a>	
Friedman, D. D., "Law's order: What economics has to do with law and why it matters," Princeton University Press, 2000	
Hong, Yongmiao, "Probability and Statistics for Economists," World Scientific Publishing Company, 2017	
Hood, Christopher, "Credit claiming, blame avoidance, and negativity bias," in The Blame Game: Spin, bureaucracy and self-preservation in government, Princeton University 1-23, 2013 <a href="http://www.match.com">http://www.match.com</a>	
Hu, N., Pavlou, P. A., and Zhang, J., "On self-selection biases in online product reviews," MIS quarterly, 41(2), 2017, 449-475	
Ito, Tiffany A., Jeff T. Larsen, N. Kyle Smith, and John T. Cacioppo, "Negative information weighs more heavily on the brain: the negativity bias in evaluative categorizations," Journal of Personality and Social Psychology 75(4), 1998, 887-900.	
Kahneman, Daniel and Amos Tversky, "Prospect theory: An analysis of decision under risk." Econometrica 47.2, 1979, 363-391	
Kaye, David H. and David A Freedman, "Reference Guide on Statistics," Reference Manual on Scientific Evidence: Third Edition, National Academy of Sciences, 2011	
Levitt, Steven D., "Why Do People Post Reviews on Amazon?," Freakonomics, July 22, 2005, <a href="https://freakonomics.com/2005/07/why-do-people-post-reviews-on-amazon/">https://freakonomics.com/2005/07/why-do-people-post-reviews-on-amazon/</a>	
Loranger, Hoa, "The Negativity Bias in User Experience," Nielsen Norman Group, October 23, 2016, <a href="https://www.nngroup.com/articles/negativity-bias-ux/">https://www.nngroup.com/articles/negativity-bias-ux/</a> .	
Match Group, Inc., 2022 Form 10-K	
Match Group, LLC, "Our Company," <a href="https://mtch.com/ourcompany">https://mtch.com/ourcompany</a>	
Morning Consult National National Tracking Poll #180111, page 49, <a href="http://www.statista.com/statistics/809450/us-users-favorite-dating-websites-apps-age-group/">http://www.statista.com/statistics/809450/us-users-favorite-dating-websites-apps-age-group/</a>	

Pappalardo, J.K., “Economics of Consumer Protection: Contributions and Challenges in Estimating Consumer Injury and Evaluating Consumer Protection Policy,” Journal of Consumer Policy (2022) 45:201–238
Rozin, Paul, and Royzman, Edward B., “Negativity Bias, Negativity Dominance, and Contagion,” Personality and Social Psychology Review 5(4), 2001, 296-320.
Runge, J., Wentzel, D., Huh, J.Y., and Change, A., “Dark patterns in online services: a motivating study and agenda for future research,” Marketing Letters, 2023, 34:155-160
Sauro, Jeff, 2011, “What Is A Good Task-Completion Rate? – MeasuringU.” March 21, 2011, <a href="https://measuringu.com/task-completion/">https://measuringu.com/task-completion/</a>
Sauro, Jeff, and James Lewis, “Quantifying the User Experience: Practical Statistics for User Research,” 2nd Edition, 2016
Schupp, Harald T., Arne Öhman, Markus Junghöfer, Almut I. Weike, Jessica Stockburger, and Alfons O. Hamm, “The facilitated processing of threatening faces: an ERP analysis,” Emotion 4(2), 2004, 189–200
U.S. Census Bureau, “Table A1. Marital Status of People 15 Years and Over, by Age, Sex, and Personal Earnings: 2021,” America’s Families and Living Arrangements: 2021, <a href="https://www.census.gov/data/tables/2021/demo/families/cps-2021.html">https://www.census.gov/data/tables/2021/demo/families/cps-2021.html</a>
<b>Interviews</b>
Jim Talbott, Web Analyst, Match.com, February 13, 2023, February 28, 2023, March 10, 2023, April 10, 2023, May 31, 2023, and June 13, 2023.
<b>Bates Numbered Materials</b>
F01-MG-0028502
MATCHFTC551250
MATCHFTC561431
MATCHFTC772558
MATCHFTC772558
MATCHFTC773498
MATCHFTC774721
MATCHFTC774726
MATCHFTC776031
MATCHFTC776595
MATCHFTC776595
MATCHFTC776596
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# EXHIBIT 6

World Leaders in Research-Based User Experience

## How to Conduct a Heuristic Evaluation

**Summary:** Step-by-step instructions to systematically review your product to find potential usability and experience problems. Download a free heuristic evaluation template.

By [Kate Moran](#) and [Kelley Gordon](#) on June 25, 2023

**Topics:** [Heuristic Evaluation](#)

A **heuristic evaluation** is a method for identifying design problems in a user interface. Evaluators judge the design against a set of guidelines (called heuristics) that make systems easy to use. (For more information about how and why this tool was developed, read Jakob Nielsen's 1994 article, ["The Theory Behind Heuristic Evaluations"](#).)

A heuristic evaluation can be conducted with any set of heuristics. To assess usability, we recommend [Jakob Nielsen's 10 usability heuristics](#) — a set of high-level guidelines based on an understanding of human behavior, psychology, and information processing. For specialized domains or types of usability assessments, you may consider using other domain-specific ones in addition.

## When to Conduct a Heuristic Evaluation

Heuristic evaluations are useful for identifying glaring problems in an interface. That interface can be just about

*Related course:*

[UX Basic Training](#)

*Related download:*

[Heuristic Evaluation Workbook \(PDF\)](#)

TOP

anything that users will interact with — including prototypes, physical products, [games](#), [virtual reality](#), or [voice interfaces](#). The method can be particularly helpful early in the design process.

Heuristic evaluations are **useful for stretching a limited UX research budget**, because they help you find likely issues without having to test with participants.

However, **heuristic evaluations cannot replace user research**. User-experience design is [highly contextual](#). To design good experiences, you'll still need to test with actual users. But heuristic [evaluations can complement your team's research](#) work; for example, a conducting a heuristic evaluation in preparation for an upcoming usability test might help you identify the elements of the design that you should target during testing.

Conducting heuristic evaluations is also a good way to **develop strong UX instincts**. If you're new to UX, consider using heuristic evaluations as a way to train yourself to catch common usability issues. Practice conducting these evaluations on many different types of products — whether you actually work on them or not.

## Step 1: Prepare for a Heuristic Evaluation

### Choose and Train Your Team

Heuristic evaluations work best when performed by a group of people, not just by one evaluator. This is because each individual (no matter how experienced or expert) is likely to miss some of the potential usability issues. Ideally, **three to five people should independently evaluate** the same interface.

Teams conducting their first heuristic evaluation will need a bit of **training and preparation** before they begin. Start by asking each person to read and understand the [heuristics](#).

Next, consider doing a **practice round** with a simple design as a group. You might conduct a collaborative evaluation of a weather app, for example. The point of this practice round is to ensure that everyone on the team understands what they're expected to do during an evaluation (more details on this in step 2.)

TOP

Your evaluators will need a place to collect their observations. You might use:

- **Our heuristic-evaluation workbook:** Each team member can fill out a printed or digital version of this interactive PDF. [Download our free workbook](#) to use it in your evaluation.
- **A spreadsheet:** Evaluators can capture one observation per line, along with its corresponding heuristic.
- **A digital whiteboard:** In a tool like Miro or Mural, create separate workspaces for each evaluator. Include screenshots of the interface and have evaluators place sticky notes directly on the elements they're analyzing.

If you choose to use a shared document or space (like Google Sheets or a digital-whiteboard tool), **your team members should not see each other's evaluations until their own evaluation is complete.** The point of having multiple evaluators is to capture independent observations, so you don't want team members to influence each other.

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# Heuristic Evaluation Workbook

**EVALUATOR:****DATE:****PRODUCT:****TASK:****1**

## Visibility of System Status

The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.

- Does the design clearly communicate its state?
- Is feedback presented quickly after user actions?

Issues

Recommendations

**2**

## Match Between System and the Real World

The design should speak the users' language. Use words, phrases, and concepts familiar to the user, rather than internal jargon. Follow real-world conventions, making information appear in a natural and logical order.

- Will user be familiar with the terminology used in the design?
- Do the design's controls follow real-world conventions?

Issues

Recommendations

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The interactive [heuristic-evaluation workbook](#) includes a reminder of each of the 10 heuristics, with space for the evaluator to write down issues and recommendations.

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The **narrower the scope**, the easier and more detailed the evaluation will be. For your team's first heuristic evaluation — or if you have a large, complex product — consider keeping your scope narrow to make things manageable.

Narrow your scope by looking at:

- One task at a time
- One section of the site or app
- One user group, if you have many with diverse needs
- One device type (desktop, tablet, mobile)

## Step 2: Evaluate Independently

Next, each team member should evaluate the interface on their own.

It's important to timebox this activity to make it manageable. We recommend reserving about **1–2 hours**.

### Become Familiar with the Product

Let's consider a simple ecommerce example to explain how the evaluation might work.

**Product:** Banana Republic site

**User Group:** Shoppers

**Task:** Buying a shirt

**Device:** Mobile

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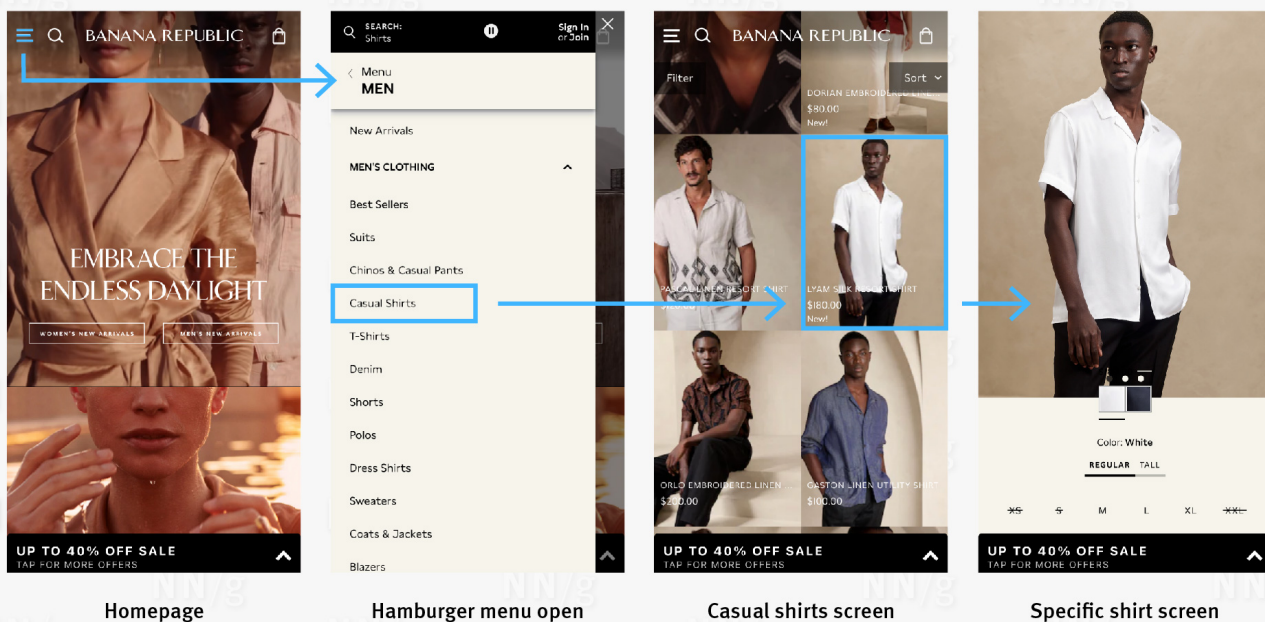
# Heuristic Evaluation Workbook

NN/g NNGROUP.COM

Evaluator: **KATE**  
 Date: **JULY 2023**  
 Product: **BANANAREPUBLIC.COM**  
 User Group: **SHOPPERS**  
 Task: **BUYING A SHIRT**  
 Device: **MOBILE**

Fill in the details of the product you'll be reviewing at the top of your workbook. Include the specific user group, task, or device, if you've narrowed your scope.

## Task: Buying a Shirt



Bananarepublic.com: A possible flow leading to a product page

TOP



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Start the evaluation by moving through the interface as if you're a user trying to complete a task. If you aren't already familiar with this product, **go through the task once just to learn** the system, without attempting to evaluate anything.

## Look for Issues

Once you feel comfortable and familiar with the product, go back through the task a second time. In this second pass, look for **design elements, features, or decisions that violate one of the [10 heuristics](#)** — in other words, they don't achieve that goal or follow that guideline. If you're using our heuristic-evaluation template, those will be the things you write down in the appropriate *Issues* section.

For example, one of the 10 heuristics is [aesthetic and minimalist design \(#8\)](#). This heuristic recommends that the visual design of interfaces should direct users' attention and help them achieve their goals. The product should not feel visually overwhelming or distracting.

Banana Republic's [listing pages](#) layer the product details (name, price, discount) in white text directly on top of the product images. As a result, the page feels cluttered, and the text is difficult to read. This is an example of how the visual design fails to support the user's task (choosing and buying a shirt).



← **ISSUE:**  
**TEXT OVERLAPS**  
**WITH PRODUCT**  
**IMAGES**

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*Banana Republic site: The text layered over images violates heuristic #8 — aesthetic and minimalist design.*

In the heuristic evaluation workbook, we might write “Text overlaps with product images on listing pages” in the issues column for heuristic #8. If a recommendation for a fix comes to mind, you can note that in the second column under *Recommendations*. For example, “Improve product-detail visibility — maybe add a solid or semi-opaque background behind text.”

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## Heuristic Evaluation Workbook

8

### Aesthetic and minimalist design

Interfaces should not contain information that is irrelevant or rarely needed. Every extra unit of information in an interface competes with the relevant units of information and diminishes their relative visibility.

- Is the visual design and content focused on the essentials?
- Have all distracting, unnecessary elements been removed?

#### Issues

TEXT OVERLAPS WITH  
PRODUCT IMAGES ON  
LISTING PAGES

#### Recommendations

IMPROVE PRODUCT  
DETAIL VISIBILITY —  
MAYBE ADD A SOLID  
OR SEMI-OPAQUE  
BACKGROUND BEHIND  
TEXT

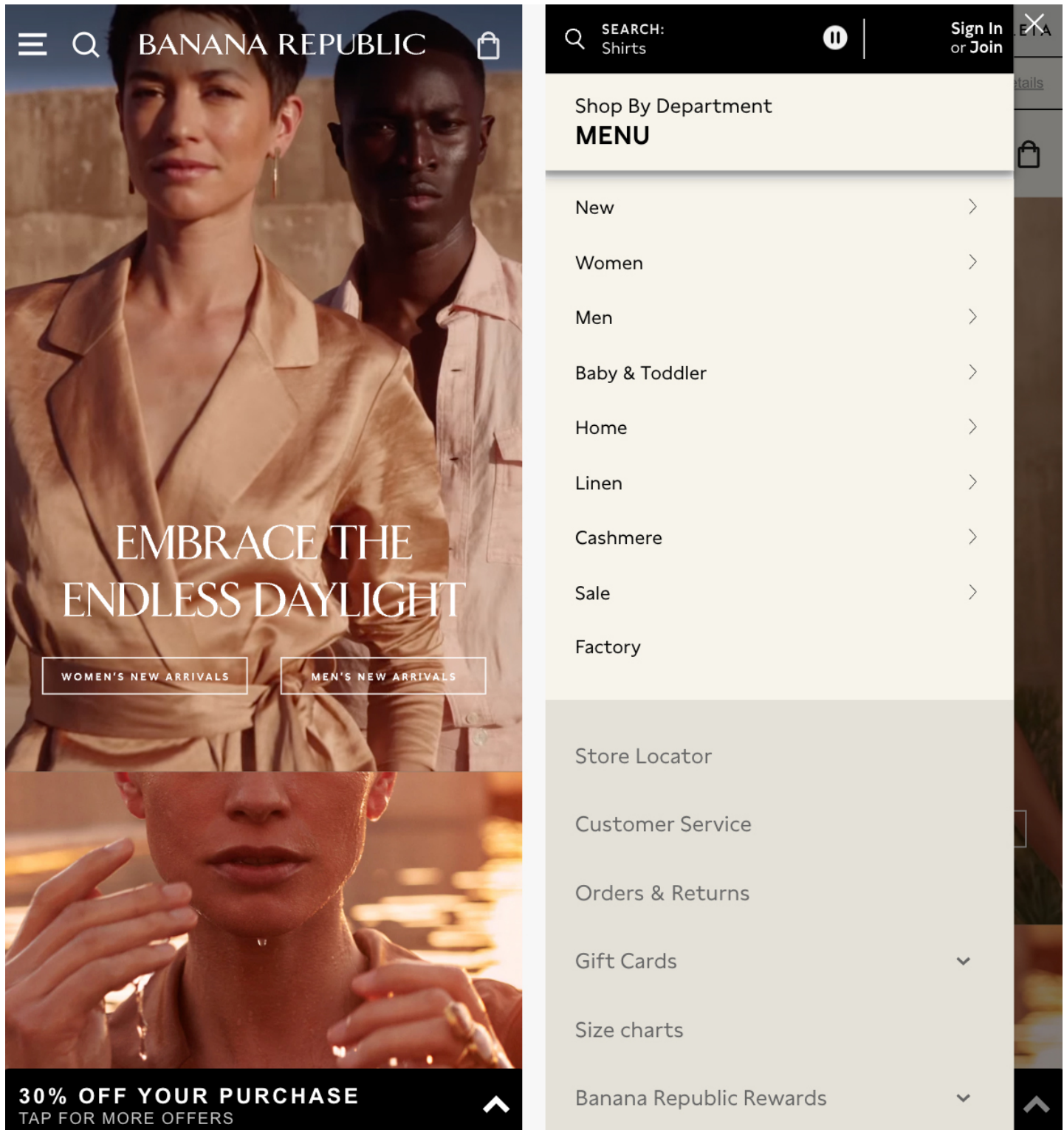
NNGROUP.COM NN/g

*The heuristic evaluation workbook contains space to write down potential issues and recommendations for each of the 10 heuristics.*

Another heuristic is [recognition rather than recall \(#6\)](#). As much as possible in the design, we want to reduce the burden on people's short-term memory by keeping important information visible on the screen.

We might notice that Banana Republic is using a [hamburger menu](#) as their global navigation — their navigation categories are hidden behind a menu icon in the upper left-hand corner. We might decide to document that as a violation of heuristic #6.

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*Hamburger menus — like the one Banana Republic’s site uses — do violate the recognition-rather-than-recall heuristic, because they hide important navigation choices, and the user has to remember to open them up to see the available options. However, that doesn’t mean that a hamburger menu was the wrong design choice in this example.*

TOP

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This example brings up something important to note: **just because a design choice violates a heuristic, that does not necessarily mean it's a problem** that needs to be fixed — [it depends](#) on the particular context and the available alternatives. [Hamburger menus do violate heuristic #6](#), but, in mobile designs, that [tradeoff](#) is often necessary due to reduced screen space.

This is a great illustration of why **heuristic evaluations are not a replacement for user research**. We still need to observe our users as they are using our products to fully understand design problems.

## Step 3: Consolidate Identified Issues

Once all your team members have performed their independent evaluations, it's time to synthesize the issues. [Affinity diagramming](#) (clustering similar issues) on a physical or virtual whiteboard can work well.

Discuss with your team:

- Where do we agree? Where do we disagree?
- Which issues seem most detrimental to the overall experience?
- Which issues could be most problematic for our organization or business goals?
- Which issues do we need more data on? Which should we prioritize in our next [usability test?](#)
- What steps can we take in the short and long term to address these problems?

## Exceptions

There are exceptions to these heuristics, but they're typically rare and based on context. Heuristics are guidelines, not laws, and there are some cases where you may have to violate a heuristic in pursuit of another goal (as was the case with Banana Republic's hamburger menu).

But, [as Jakob Nielsen says](#), "you should not bet that your design is one of the few exceptions." Before deciding to intentionally violate a usability heuristic, conduct user

## Conclusion

Heuristic evaluations become easier the more you conduct them. With practice, you'll need to rely less and less on the actual heuristics. You'll start to develop UX instincts, so you can quickly recognize potential usability problems.

## References

- Nielsen, J., and Molich, R. (1990). Heuristic evaluation of user interfaces, *Proc. ACM CHI'90 Conf.* (Seattle, WA, 1-5 April), 249-256.
- Nielsen, J. (1994). Heuristic evaluation. In Nielsen, J., and Mack, R.L. (Eds.), [\*Usability Inspection Methods\*](#). John Wiley & Sons, New York, NY.
- Nielsen, J., and Landauer, T. K. 1993. A mathematical model of the finding of usability problems. *Proceedings ACM/IFIP INTERCHI'93 Conference* (Amsterdam, The Netherlands, April 24-29), 206-213.

## Download

[Heuristic Evaluation Workbook \(PDF\)](#)

*(An earlier version of this article was originally published November 1, 1994. The article was last updated and revised on June 25, 2023.)*

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# EXHIBIT 7





World Leaders in Research-Based User Experience

# First Rule of Usability? Don't Listen to Users

**Summary:** To design the best UX, pay attention to what users do, not what they say. Self-reported claims are unreliable, as are user speculations about future behavior. Users do not know what they want.

By [Jakob Nielsen](#) on August 4, 2001

**Topics:** [Research Methods](#)

In past years, the greatest usability barrier was the preponderance of cool design. Most projects were ruled by usability opponents who preferred complexity over simplicity. As a result, billions of dollars were wasted on flashy designs that were difficult to use.

One of the main advantages of the "dot-bomb" downturn is that cool design has suffered a severe setback. Companies are now focused on the bottom line:

- **Public websites**, which formerly focused on building awareness, now aim at making it easy for customers to do business.
- **Intranets** are similarly refocused on [improving employee productivity](#). Many companies are attempting to create order, impose design standards, and enhance navigation on previously chaotic intranets.

TOP

Happily, glamour-based design has lost and usability advocates have won the first and hardest victory: Companies are now paying attention to usability needs.

Unfortunately, winning a battle with usability opponents doesn't win the war with complexity. It simply moves us to a new front line: The battle is now to get companies to do usability *right*.

## Watch Users Work

Too frequently, I hear about companies basing their designs on user input obtained through misguided methods. A typical example? Create a few alternative designs, show them to a group of users, and ask which one they prefer. *Wrong*. If the users have not actually tried to use the designs, they'll base their comments on surface features. Such input often contrasts strongly with feedback based on real use.

For example: A spinning logo might look pretty cool if you don't need to accomplish anything on the page. Another example is the drop-down menu. Users always love the idea: finally a standard user interface widget that they understand and that stays the same on every page. However, while they offer users a sense of power over the design, [drop-down menus often have low usability](#) and either confuse users or lead them to unintended parts of the site.

To discover which designs work best, **watch users as they attempt to perform tasks** with the user interface. This method is so simple that many people overlook it, assuming that there must be something more to usability testing. Of course, there are many ways to watch and [many tricks](#) to running an optimal user test or field study. But ultimately, the way to get user data boils down to the **basic rules of usability**:

- Watch what people actually do.
- Do not believe what people say they do.
- Definitely don't believe what people predict they *may* do in the future.

TOP

Say, for example, that 50% of survey respondents claim they would buy more from ecommerce sites that offer 3-D product views. Does this mean you should rush to implement 3-D on your site? No. It means that "3-D" sounds cool. The world is littered with failed businesses that banked on people's attitude toward hypothetical products and services. In speculative surveys, people are simply guessing how they might act or which features they'll like; it doesn't mean they'll actually use or like them in real life.

## When and How to Listen

When should you collect [preference data](#) from users? Only after they have used a design and have a real feeling for how well it supports them. Jonathan Levy and I analyzed data from 113 pairwise comparisons of user interfaces designed to support the same task and found a **0.44** correlation between users' measured performance and their stated preference. **The more a design supports users in easily and efficiently doing what they want to do, the more they like the design.** Very understandable.

(Update: in newer research, I found a correlation of  $r=.53$  between [users' performance and preferences for websites](#). Higher than for the PC applications that had a .44 correlation, but still low because this shows that you can only **predict about a quarter of how well a design works from knowing [how much users say they like it.](#)**)

However, when collecting preference data, you must take human nature into account. When talking about past behavior, users' **self-reported data is typically 3 steps removed from the truth:**

- In answering questions (particularly in a [focus group](#)), people bend the truth to be closer to what they **think you want to hear** or what's socially acceptable.
- In telling you what they do, people are really telling you what they **remember** <sup>TOP</sup> doing. Human memory is very fallible, especially regarding the small details that

as interface elements that they didn't see.

- In reporting what they do remember, people **rationalize** their behavior. Countless times I have heard statements like "I would have seen the button if it had been bigger." Maybe. All we know is that the user didn't see the button.

So, *do users know what they want?* No, no, and no. Three times no.

Finally, you must consider how and when to solicit feedback. Although it might be tempting to simply post a survey online, you're unlikely to get reliable input (if you get any at all). Users who see the survey and fill it out before they've used the site will offer irrelevant answers. Users who see the survey after they've used the site will most likely leave without answering the questions. One question that does work well in a website survey is "Why are you visiting our site today?" This question goes to users' motivation and they can answer it as soon as they arrive.

Your best bet in soliciting reliable feedback is to have a captive audience: Conduct formal testing and ask users to fill out a survey at the end. With techniques like [paper prototyping](#), you can test designs and question users without implementing a thing. Following these basic usability rules and methods will help you ensure that your design is truly as cool as it looks.

## Reference

Nielsen, J., and Levy, J. (1994). Measuring usability — preference vs. performance. *Communications of the ACM* **37**, 4 (April), 66–75.

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# EXHIBIT 8



BILLING CODE 6750-01-P

**FEDERAL TRADE COMMISSION**

**16 CFR Part 425**

**RIN 3084-AB60**

**Negative Option Rule**

**AGENCY:** Federal Trade Commission.

**ACTION:** Proposed rule.

**SUMMARY:** The Federal Trade Commission (“FTC” or “Commission”) seeks public comment on proposed amendments to the Commission’s Negative Option Rule (or “Rule”) to combat unfair or deceptive practices that include recurring charges for products or services consumers do not want and cannot cancel without undue difficulty.

**DATES:** Written comments must be received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. Parties interested in presenting views orally should submit a request to do so as explained below, and such requests must be received on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Interested parties may file a comment online or on paper, by following the instructions in the Request for Comment part of the **SUPPLEMENTARY INFORMATION** section below. Write “Negative Option Rule; Project No. P064202” on your comment and file your comment online through <https://www.regulations.gov>. If you prefer to file your comment on paper, mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC-5610 (Annex N), Washington, DC 20580.

**FOR FURTHER INFORMATION CONTACT:** Hampton Newsome, Attorney, (202) 326-2889, Division of Enforcement, Bureau of Consumer Protection, Federal Trade Commission, 600 Pennsylvania Avenue NW, Washington, DC 20580.

**SUPPLEMENTARY INFORMATION:**

**I. Overview**

The Commission seeks comment on a proposal to improve its existing regulations for negative option programs. These programs are widespread in the marketplace and can provide substantial benefits for sellers and consumers. However, consumers cannot reap these benefits when marketers fail to make adequate disclosures, bill consumers without their consent, or make cancellation difficult or impossible. Problematic negative option practices have remained a persistent source of consumer harm for decades, saddling shoppers with recurring payments for products and services they never intended to purchase or did not want to continue buying. In the past, the Commission sought to address these practices through individual law enforcement cases and a patchwork of laws and regulations. Nevertheless, problems persist, and consumers continue to submit thousands of complaints to the FTC each year.

To solicit input about these issues, the Commission published an Advance Notice of Proposed Rulemaking (ANPR) on October 2, 2019 (84 FR 52393). After reviewing the comments received in response and issuing an “Enforcement Policy Statement Regarding Negative Option Marketing” on November 4, 2021 (86 FR 60822), the Commission, as detailed in this document, now proposes to amend the existing Rule to implement new requirements to provide important information to consumers, obtain consumers’ express informed consent, and ensure consumers can easily cancel these programs when they

choose. All of these proposed changes would be applicable to all forms of negative option marketing in all media (*e.g.*, telephone, Internet, traditional print media, and in-person transactions).<sup>1</sup>

## II. Negative Option Marketing

Negative option offers come in a variety of forms, but all share a central feature: each contain a term or condition that allows a seller to interpret a customer's silence, or failure to take an affirmative action, as acceptance of an offer.<sup>2</sup> Before describing the proposed amendments, it is helpful to review the various forms such an offer can take. Negative option marketing generally falls into four categories: prenotification plans, continuity plans, automatic renewals, and free trial (*i.e.*, free-to-pay or nominal-fee-to-pay) conversion offers.

Prenotification plans are the only negative option practice currently covered by the Commission's Negative Option Rule. Under such plans (*e.g.*, book-of-the-month clubs), sellers provide periodic notices offering goods to participating consumers and then send—and charge for—those goods only if the consumers take no action to decline the offer. The periodic announcements and shipments can continue indefinitely. In continuity plans, consumers agree in advance to receive periodic shipments of goods or provision of services (*e.g.*, bottled water delivery), which they continue to receive until

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<sup>1</sup> The Commission proposes to issue such amendments pursuant to Section 18 of the FTC Act, which authorizes the Commission to promulgate rules specifying acts or practices in or affecting commerce which are unfair or deceptive. 15 U.S.C. 57a(a)(2).

<sup>2</sup> The Commission's Telemarketing Sales Rule defines a negative option feature as a provision in an offer or agreement to sell or provide any goods or services "under which the customer's silence or failure to take an affirmative action to reject goods or services or to cancel the agreement is interpreted by the seller as acceptance of the offer." 16 CFR 310.2(w).

they cancel the agreement. In automatic renewals, sellers (*e.g.*, a magazine publisher, credit monitoring service provider, etc.) automatically renew consumers' subscriptions when they expire, unless consumers affirmatively cancel the subscriptions. Finally, with free trial marketing, consumers receive goods or services for free (or at a nominal fee) for a trial period. After the trial period, sellers automatically begin charging a fee (or higher fee) unless consumers affirmatively cancel or return the goods or services.

Some negative option offers include upsell or bundled offers, where sellers use consumers' billing data to sell additional products from the same seller or pass consumers' billing data to a third party for their sales. An upsell occurs when a consumer completes a first transaction and then receives a second solicitation for an additional product or service. A bundled offer occurs when a seller packages two or more products or services together so they cannot be purchased separately.

### **III. FTC's Current Negative Option Rule**

The Commission first promulgated the Rule in 1973 pursuant to the FTC Act, 15 U.S.C. 41 *et seq.*, finding some negative option marketers committed unfair and deceptive practices that violated Section 5 of the Act, 15 U.S.C. 45. The Rule applies only to prenotification plans for the sale of goods, and therefore, does not reach most modern negative option marketing.<sup>3</sup>

The current Rule requires prenotification plan sellers to disclose their plan's material terms clearly and conspicuously before consumers subscribe. It enumerates

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<sup>3</sup> The Rule defines "negative option plan" narrowly to apply only to prenotification plans. 16 CFR 425.1(c)(1). In 1998, the Commission clarified the Rule's application to such plans in all media, stating that it "covers all promotional materials that contain a means for consumers to subscribe to prenotification negative option plans, including those that are disseminated through newer technologies." 63 FR 44555, 44561 (Aug. 20, 1998).

seven material terms sellers must disclose: (1) how subscribers must notify the seller if they do not wish to purchase the selection; (2) any minimum purchase obligations; (3) the subscribers' right to cancel; (4) whether billing charges include postage and handling; (5) that subscribers have at least ten days to reject a selection; (6) that if any subscriber is not given ten days to reject a selection, the seller will credit the return of the selection and postage to return the selection, along with shipping and handling; and (7) the frequency with which announcements and forms will be sent.<sup>4</sup> In addition, sellers must provide particular periods during which they will send introductory merchandise, give consumers a specified period to respond to announcements, provide instructions for rejecting merchandise in announcements, and promptly honor written cancellation requests.<sup>5</sup>

#### **IV. Other Current Regulatory Requirements**

Several other statutes and regulations also address harmful negative option practices. First, Section 5 of the FTC Act, which prohibits unfair or deceptive acts or practices, has traditionally served as the Commission's primary mechanism for addressing deceptive negative option claims. Additionally, the Restore Online Shoppers' Confidence Act ("ROSCA"), 15 U.S.C. 8401-8405, the Telemarketing Sales Rule, 16 CFR Part 310, the Postal Reorganization Act (*i.e.*, the Unordered Merchandise Statute), 39 U.S.C. 3009, and the Electronic Fund Transfer Act ("EFTA"), 15 U.S.C. 1693-1693r, all address various aspects of negative option marketing. ROSCA, however, is the only law primarily designed to do so.

##### **A. Section 5 of the FTC Act**

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<sup>4</sup> 16 CFR 425.1(a)(1)(i)-(vii).

<sup>5</sup> 16 CFR 425.1(a)(2) and (3); 425.1(b).

Section 5(a) of the FTC Act, 15 U.S.C. 45(a), is the core consumer protection statute enforced by the Commission. That section broadly addresses “unfair or deceptive acts or practices” but has no provisions that specifically address negative option marketing.<sup>6</sup> Therefore, in guidance and cases, the FTC has highlighted five basic Section 5 requirements that negative option marketing must follow to avoid deception.<sup>7</sup> First, marketers must disclose the material terms of a negative option offer including, at a minimum: the existence of the negative option offer; the offer’s total cost; the transfer of a consumer’s billing information to a third party, if applicable; and how to cancel the offer. Second, Section 5 requires that these disclosures be clear and conspicuous. Third,

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<sup>6</sup> Under the FTC Act, “unfair or deceptive acts or practices” include acts or practices involving foreign commerce that cause or are likely to cause reasonably foreseeable injury within the United States or involve material conduct occurring within the United States. 15 U.S.C. 45(a)(4)(A). Section 5(n) of the FTC Act provides that “unfair” practices are those that cause or are likely “to cause substantial injury to consumers which is not reasonably avoidable by consumers themselves and not outweighed by countervailing benefits to consumers or to competition.” 15 U.S.C. 45(n).

<sup>7</sup> See *Negative Options: A Report by the Staff of the FTC’s Division of Enforcement*, 26-29 (Jan. 2009), <https://www.ftc.gov/sites/default/files/documents/reports/negative-options-federal-trade-commission-workshop-analyzing-negative-option-marketing-report-staff/p064202negativeoptionreport.pdf>. In discussing the five principal Section 5 requirements related to negative options, the report cites to the following pre-ROSCA cases, *FTC v. JAB Ventures*, No. CV08-04648 (C.D. Cal. 2008); *FTC v. Complete Weightloss Center*, No. 1:08cv00053 (D.N.D. 2008); *FTC v. Berkeley Premium Nutraceuticals*, No. 1:06cv00051 (S.D. Ohio 2006); *FTC v. Think All Publ’g*, No. 4:07cv11 (E.D. Tex. 2006); *FTC v. Hispanexo*, No. 1:06cv424 (E.D. Va. 2006); *FTC v. Consumerinfo.com*, No. SACV05-801 (C.D. Cal. 2005); *FTC v. Conversion Mktg.*, No. SACV04-1264 (C.D. Cal. 2004); *FTC v. Mantra Films*, No. CV03-9184 (C.D. Cal. 2003); *FTC v. Preferred Alliance*, No. 103-CV0405 (N.D. Ga. 2003); *United States v. Prochnow*, No. 102-CV-917 (N.D. Ga. 2002); *FTC v. Ultralife Fitness, Inc.*, No. 2:08-cv-07655-DSF-PJW (C.D. Cal. 2008); *In the Matter of America Isuzu Motors*, FTC Docket No. C-3712 (1996); *FTC v. Universal Premium Services*, No. CV06-0849 (C.D. Cal. 2006); *FTC v. Remote Response*, No. 06-20168 (S.D. Fla. 2006). The report also cited the FTC’s previously issued guidance, *Dot Com Disclosures* (2002), archived at <https://www.ftc.gov/sites/default/files/attachments/press-releases/ftc-staff-issues-guidelines-internet-advertising/0005dotcomstaffreport.pdf>.

sellers must disclose the material terms of the negative option offer before consumers agree to the purchase. Fourth, marketers must obtain consumers' consent to such offers. Finally, marketers must not impede the effective operation of promised cancellation procedures and must honor cancellation requests that comply with such procedures.

Although these basic guidelines are useful, the legality of a particular negative option depends on an individualized assessment of the advertisement's net impression and the marketer's business practices. In addition to these deception-based requirements, the Commission has repeatedly stated billing consumers without consumers' express informed consent is an unfair act under the FTC Act.<sup>8</sup>

## **B. ROSCA**

Enacted by Congress in 2010 to address ongoing problems with online negative option marketing, ROSCA contains general provisions related to disclosures, consent, and cancellation.<sup>9</sup> ROSCA prohibits charging or attempting to charge consumers for goods or services sold on the Internet through any negative option feature unless the marketer: (1) clearly and conspicuously discloses all material terms of the transaction before obtaining the consumer's billing information, regardless of whether a material term directly relates to the terms of the negative option offer;<sup>10</sup> (2) obtains a consumer's express informed consent before charging the consumer's account; and (3) provides

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<sup>8</sup> Courts have found unauthorized billing to be unfair under the FTC Act. *See, e.g., FTC v. Neovi, Inc.*, 604 F.3d 1150, 1157-59 (9th Cir. 2010), *amended by* 2010 WL 2365956 (9th Cir. June 15, 2010); *FTC v. Amazon.com, Inc.*, No. C14-1038-JCC, 2016 WL 10654030, at \*8 (W.D. Wash. Apr. 26, 2016); *FTC v. Ideal Fin. Sols., Inc.*, No. 2:13-CV-00143-JAD, 2015 WL 4032103, at \*8 (D. Nev. June 30, 2015).

<sup>9</sup> 15 U.S.C. 8401-8405.

<sup>10</sup> *See In re: MoviePass, Inc.*, No. C-4751 (Oct. 5, 2021).

simple mechanisms for the consumer to stop recurring charges.<sup>11</sup> ROSCA, however, does not prescribe specific steps marketers must follow to comply with these provisions.

ROSCA also addresses offers made by, or on behalf of, third-party sellers during, or immediately following, a transaction with an initial merchant.<sup>12</sup> In connection with these offers, ROSCA prohibits post-transaction, third-party sellers from charging or attempting to charge consumers unless the seller: (1) before obtaining billing information, clearly and conspicuously discloses the offer's material terms; and (2) receives the consumer's express informed consent by obtaining the consumer's name, address, contact information, as well as the full account number to be charged, and requiring the consumer to perform an additional affirmative action indicating consent.<sup>13</sup> ROSCA also prohibits initial merchants from disclosing billing information to any post-transaction third-party seller for use in any Internet-based sale of goods or services.<sup>14</sup>

Furthermore, a violation of ROSCA is a violation of a Commission trade regulation rule under Section 18 of the FTC Act.<sup>15</sup> Thus, the Commission may seek a variety of remedies for violations of ROSCA, including civil penalties under Section 5(m)(1)(A) of the FTC Act;<sup>16</sup> injunctive relief under Section 13(b) of the FTC Act;<sup>17</sup> and

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<sup>11</sup> 15 U.S.C. 8403. ROSCA incorporates the definition of “negative option feature” from the Commission’s Telemarketing Sales Rule, 16 CFR 310.2(w).

<sup>12</sup> ROSCA defines “post-transaction third-party seller” as a person other than the initial merchant who sells any good or service on the Internet and solicits the purchase on the Internet through an initial merchant after the consumer has initiated a transaction with the initial merchant. 15 U.S.C. 8402(d)(2).

<sup>13</sup> 15 U.S.C. 8402(a).

<sup>14</sup> 15 U.S.C. 8402(b).

<sup>15</sup> 15 U.S.C. 8404 (citing Section 18 of the FTC Act, 15 U.S.C. 57a).

<sup>16</sup> 15 U.S.C. 45(m)(1)(A).

<sup>17</sup> 15 U.S.C. 53(b).



consumer redress, damages, and other relief under Section 19 of the FTC Act.<sup>18</sup>

Although Congress charged the Commission with enforcing ROSCA, it did not direct the FTC to promulgate implementing regulations.

### **C. Telemarketing Sales Rule**

The Telemarketing Sales Rule (“TSR”), 16 CFR Part 310, prohibits deceptive telemarketing acts or practices, including those involving negative option offers, and certain types of payment methods common in deceptive negative option marketing. The TSR only applies to negative option offers made over the telephone. Specifically, the TSR requires telemarketers to disclose all material terms and conditions of the negative option feature, including the need for affirmative consumer action to avoid the charges, the date (or dates) the charges will be submitted for payment, and the specific steps the customer must take to avoid the charges. It also prohibits telemarketers from misrepresenting such information and contains specific requirements related to payment authorization.<sup>19</sup>

### **D. Other Relevant Requirements**

EFTA<sup>20</sup> and the Unordered Merchandise Statute also contain provisions relevant to negative option marketing.<sup>21</sup> EFTA prohibits sellers from imposing recurring charges on a consumer’s debit cards or bank accounts without written authorization.<sup>22</sup> The

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<sup>18</sup> 15 U.S.C. 57b(a)(1), (b).

<sup>19</sup> 16 CFR 310.3(a).

<sup>20</sup> 15 U.S.C. 1693-1693r.

<sup>21</sup> 39 U.S.C. 3009.

<sup>22</sup> EFTA provides that the Commission shall enforce its requirements, except to the extent that enforcement is specifically committed to some other federal government agency, and that a violation of any of its requirements shall be deemed a violation of the FTC Act. Accordingly, the Commission has authority to seek injunctive relief for EFTA violations, just as it can seek injunctive relief for other Section 5 violations.

Unordered Merchandise Statute provides that mailing unordered merchandise, or a bill for such merchandise, constitutes an unfair method of competition and an unfair trade practice in violation of Section 5 of the FTC Act.<sup>23</sup>

## **V. Limitations of Existing Regulatory Requirements**

The existing patchwork of laws and regulations does not provide industry and consumers with a consistent legal framework across media and offers. For instance, as discussed above, the current Rule does not cover common practices such as continuity plans, automatic renewals, and trial conversions.<sup>24</sup> In addition, ROSCA and the TSR do not address negative option plans in all media—ROSCA’s general statutory prohibitions against deceptive negative option marketing only apply to Internet sales, and the TSR’s more specific provisions only apply to telemarketing. Yet, harmful negative option practices that fall outside of ROSCA and the TSR’s coverage still occur.<sup>25</sup>

Additionally, the current framework does not provide clarity about how to avoid deceptive negative option disclosures and procedures. For example, ROSCA lacks specificity about cancellation procedures and the placement, content, and timing of cancellation-related disclosures. Instead, the statute requires marketers to provide “simple

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<sup>23</sup> The Commission has authority to seek the same remedies for violations of the Unordered Merchandise Statute that it can seek for other Section 5 violations. The Commission can seek civil penalties pursuant to Section 5(m)(1)(B) of the FTC Act from violators who have actual knowledge that the Commission has found mailing unordered merchandise unfair. 15 U.S.C. 45(m)(1)(B).

<sup>24</sup> Indeed, the prenotification plans covered by the Rule represent only a small fraction of negative option marketing. In 2017, for instance, the Commission estimated that fewer than 100 sellers (“clubs”) were subject to the current Rule’s requirements. 82 FR 38907, 38908 (Aug. 16, 2017).

<sup>25</sup> For instance, the Commission recently brought two cases under Section 5 involving negative option plans that did not involve either Internet sales or telemarketing. *FTC and State of Maine v. Health Research Labs., LLC*, No. 2:17-cv-00467-JDL (D. Me. 2018); and *FTC and State of Maine v. Mktg. Architects*, No. 2:18-cv-00050 (D. Me. 2018).

mechanisms” for the consumer to stop recurring charges without guidance about what is simple.

## VI. Past Rulemaking and Enforcement Efforts

The Commission initiated its last regulatory review of the Negative Option Rule in 2009,<sup>26</sup> following a 2007 FTC workshop and subsequent Staff Report.<sup>27</sup> The Commission completed the review in 2014.<sup>28</sup> At the time, the Commission found the comments supporting the Rule’s expansion “argue convincingly that unfair, deceptive, and otherwise problematic negative option marketing practices continue to cause substantial consumer injury, despite determined enforcement efforts by the Commission and other law enforcement agencies.”<sup>29</sup> It also noted practices not covered by the Rule (*e.g.*, trial conversions and continuity plans) accounted for most of its enforcement activity in this area. Nevertheless, the Commission declined to expand or enhance the Rule, concluding that amendments were not warranted at that time because the enforcement tools provided by the TSR and, especially, ROSCA, which had only recently become effective, might prove adequate to address the problems generated by deceptive or unfair negative option marketing. However, the Commission emphasized that, if

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<sup>26</sup> 74 FR 22720 (May 14, 2009).

<sup>27</sup> See *Negative Options*, *supra* note 7, at 26-29.

<sup>28</sup> 79 FR 44271 (July 31, 2014).

<sup>29</sup> The Commission cited a number of its law enforcement actions challenging negative option marketing practices, including, for example, *FTC v. Process Am., Inc.*, No. 14–0386–PSG–VBKx (C.D. Cal. 2014) (processing of unauthorized charges relating to negative option marketing); *FTC v. Willms*, No. 2:11–cv–00828 (W.D. Wash. 2011) (Internet free trials and continuity plans); *FTC v. Moneymaker*, No. 2:11–cv–00461–JCM–RJJ (D. Nev. 2012) (Internet trial offers and continuity programs); *FTC v. Johnson*, No. 2:10–cv–02203–RLH–GWF (D. Nev. 2010), (Internet trial offers); and *FTC v. John Beck Amazing Profits, LLC*, No. 2:09–cv–04719 (C.D. Cal. 2009) (infomercial and telemarketing trial offers and continuity programs).

ROSCA and its other enforcement tools failed to adequately protect consumers, the Commission would consider whether and how to amend the Rule.<sup>30</sup>

Since that review, the problems with negative options have persisted. The Commission and states continue to bring cases regularly that challenge negative option practices, including more than 30 recent FTC cases. These matters involved a range of deceptive or unfair practices, including inadequate disclosures for “free” offers and other products or services, enrollment without consumer consent, and inadequate or overly burdensome cancellation and refund procedures.<sup>31</sup> In addition, the Commission continues to receive thousands of complaints each year related to negative option marketing. These cases and the high volume of ongoing complaints suggests there is prevalent, unabated consumer harm in the marketplace.

## **VII. 2019 Advance Notice of Proposed Rulemaking**

Given these continued concerns, the Commission published its 2019 ANPR seeking comments on the current Rule, as well as possible regulatory measures to reduce consumer harm created by deceptive or unfair negative option marketing.<sup>32</sup> Specifically,

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<sup>30</sup> 79 FR at 44275-76.

<sup>31</sup> Examples of these matters include: *FTC v. Triangle Media Corp.*, 3:18-cv-01388-LAB-LL (S.D. Cal. 2019); *FTC v. Credit Bureau Ctr., LLC*, No. 17-cv-00194 (N.D. Ill. 2018); *FTC v. JDI Dating, Ltd.*, No. 1:14-cv-08400 (N.D. Ill. 2018); *FTC, Illinois, and Ohio v. One Techs., LP*, No. 3:14-cv-05066 (N.D. Cal. 2014); *FTC v. Health Formulas, LLC*, No. 2:14-cv-01649-RFB-GWF (D. Nev. 2016); *FTC v. Nutraclick LLC*, No. 2:16-cv-06819-DMG (C.D. Cal. 2016); *FTC v. XXL Impressions*, No. 1:17-cv-00067-NT (D. Me. 2018); *FTC v. AAFE Products Corp.*, No. 3:17-cv-00575 (S.D. Cal. 2017); *FTC v. Pact Inc.*, No. 2:17-cv-1429 (W.D. Wash. 2017); *FTC v. Tarr*, No. 3:17-cv-02024-LAB-KSC (S.D. Cal. 2017); *FTC v. AdoreMe, Inc.*, No. 1:17-cv-09083 (S.D.N.Y. 2017); *FTC v. DOTAuthority.com, Inc.*, No. 0:16-cv-62186-WJZ (S.D. Fla. 2018); *FTC v. Bunzai Media Group, Inc.*, No. CV15-04527-GW(PLAx) (C.D. Cal. 2018); and *FTC v. RevMountain, LLC*, No. 2:17-cv-02000-APG-GWF (D. Nev. 2018).

<sup>32</sup> 84 FR 52393 (Oct. 2, 2019).

the Commission sought comment on various alternatives, including amendments to existing rules to further address disclosures, consumer consent, and cancellation. The Commission also requested input on whether and how it should use its authority under Section 18 of the FTC Act to expand the Negative Option Rule to address prevalent, unfair, or deceptive practices involving negative option marketing.<sup>33</sup> In response, the Commission received 17 comments, which we discuss in Section IX.<sup>34</sup>

### **VIII. 2021 Enforcement Policy Statement**

On November 4, 2021, the Commission published an “Enforcement Policy Statement Regarding Negative Option Marketing” to provide guidance regarding its

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<sup>33</sup> Section 18 of the FTC Act authorizes the Commission to promulgate rules that define with specificity acts or practices in or affecting commerce which are unfair or deceptive. 15 U.S.C. 57a(a)(1)(B). The Commission may issue regulations “where it has reason to believe that the unfair or deceptive acts or practices which are the subject of the proposed rulemaking are prevalent.” 15 U.S.C. 57a(b)(3). The Commission may make such a prevalence finding if it has issued cease and desist orders regarding such acts or practices, or any other available information indicates a widespread pattern of unfair or deceptive acts or practices. Rules under Section 18 “may include requirements prescribed for the purpose of preventing such acts or practices.”

<sup>34</sup> The comments, which are at [www.regulations.gov](http://www.regulations.gov), include: Association of National Advertisers (ANA) (#0082-0008); Performance-Driven Marketing Institute (PDMI) (#0082-0018); Retail Energy Supply Association (RESA) (#0082-0016); The Association of Magazine Media (MPA) (#0082-0019); National Consumers League (NCL) (#0082-0013); ACT - The App Association (#0082-0017); Association for Postal Commerce (“PostCom”) (#0082-0009); Retail Industry Leaders Association (RILA) (#0082-0005); Ralph Oakley (#0082-0004); Chris Hoofnagle (#0082-0002); Pennsylvania Office of Attorney General (on behalf of The Attorneys General of the States of Colorado, Delaware, District of Columbia, Illinois, Iowa, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Jersey, New Mexico, New York, North Dakota, Oregon, Pennsylvania, Rhode Island, Vermont, Virginia, Washington, and Wisconsin) (“State AGs”) (#0082-0012); Service Contract Industry Council (SCIC) (#0082-0007); Truth in Advertising (TINA) (#0082-0014); Rep. Mark Takano (#0082-0003); Digital Media Association (DiMA) (#0082-0015); The Entertainment Software Association and Internet Association (ESA) (#0082-0011); News Media Alliance (“the Alliance”) (#0082-0006).

enforcement of various statutes and FTC regulations.<sup>35</sup> The Statement enunciates various principles rooted in FTC case law and previous guidance related to the provision of information to consumers, consent, and cancellations. Among these principles, the Statement emphasized ROSCA's requirement that sellers disclose all material terms related to the underlying product or service that are necessary to prevent deception, regardless of whether that term relates directly to the terms of the negative option offer.<sup>36</sup> In addition, consistent with ROSCA, judicial decisions applying Section 5, and cases brought by the Commission, the seller should obtain the consumer's acceptance of the negative option feature offer separately from any other portion of the entire transaction. Finally, regarding cancellation, the Statement explained negative option sellers should provide cancellation mechanisms at least as easy to use as the method the consumer used to initiate the negative option feature.

## **IX. Comments Received in Response to the ANPR**

Commenters generally supported the current FTC Negative Option Rule. However, as detailed below, they split on whether the Commission should amend the Rule to include new requirements. Some argued existing provisions are adequate, and any additional regulations could harm businesses and consumers by creating unnecessary, overly prescriptive directives that discourage innovation. Others contended that the Commission should expand or consolidate existing requirements into a single rule

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<sup>35</sup> 86 FR 60822.

<sup>36</sup> The Commission recently alleged a negative option seller's failure to disclose it was impeding access to its movie subscription service violates ROSCA. *In the Matter of MoviePass, Inc.* No. C-4751 (Oct. 5, 2021).

applicable to all types of negative option marketing in all types of media in order to adequately protect consumers.

#### **A. General Views on Negative Option Marketing**

***Benefits:*** Several commenters emphasized the benefits of negative option marketing to both consumers and businesses and warned new regulations may limit consumer options.<sup>37</sup> They discussed the ease and simplicity such plans offer consumers by allowing them to avoid time-consuming and inefficient transactions. The Service Contract Industry Council (SCIC) and the News Media Alliance explained such arrangements greatly reduce “the disruption to a consumer’s daily life” by allowing them to maintain their service without going through the enrollment process “month after month, or year after year.” They also help customers avoid problems such as breaks in service when they forget to renew.

The Entertainment Software Association (ESA), which represents video and computer game companies, added subscriptions allow “consumers to replenish commodity items (such as personal care products), enjoy new items or personalized items at designated intervals (such as clothing and food), and obtain access to products or services at discounts or with members-only benefits (such as entertainment and content services).” The Association of Magazine Media (MPA), an association of magazine publishers, noted that current automatic renewal subscriptions feature high transparency, offer ease of use, facilitate long-term customer relationships, provide a “frictionless customer service experience,” save costs, and allow consumers to receive continuous

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<sup>37</sup> SCIC, ESA, MPA, and RESA.

delivery for as long as they wish. According to MPA, free trials also allow consumers to sample magazine titles before committing to a subscription purchase.

Additionally, commenters detailed the benefits such renewals provide businesses. MPA stated they help companies avoid the substantial costs of processing invoices and checks each month. For publishers, automatic renewals reduce costs by eliminating multiple notices, forestalling fraudulent mailings, and preventing costly interruptions in service. Retail Energy Supply Association (RESA) also noted automatic renewal plans are critical in the competitive energy supply industry because they promote competition in states with restructured energy markets.

*Negative Aspects:* However, not all commenters saw inherent benefit in the growing negative option market. Commenter Hoofnagle, a law professor, cautioned the shift to subscription services has caused businesses to become “laser-focused” on enrollment and retention at the expense of the underlying product or consumer value.<sup>38</sup> In his view, the new focus on subscriptions “corrupts innovation” because it motivates companies to “invest in psychological tricks to maintain continuous charging” instead of creating the “best, most compelling products.” According to Hoofnagle, large, dominant platforms devote resources to developing manipulative subscription systems (*i.e.*, “dark patterns”) that induce consumers to sign up for products and services they would not otherwise pay for. Hoofnagle asserted that, ultimately, subscription maintenance becomes the firm’s “terminal goal.”

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<sup>38</sup> NCL also asserted “[t]here is abundant evidence that consumers are harmed by negative option clauses.”



## **B. Information on Current Practices and Deception in the Market**

Various commenters submitted information about the scope, volume, and types of negative option marketing, indicating negative options involving free trials, continuity, and auto-renewal programs are pervasive and growing in number. Additionally, many commenters asserted deceptive negative option practices continue to be prevalent, with some describing particular issues with free trials. Finally, commenters discussed ongoing state enforcement efforts related to these problems.

***Expansion of Negative Option Marketing:*** Several commenters indicated negative option marketing continues to grow dramatically. For instance, according to a 2018 McKinsey & Company study, the subscription e-commerce market increased more than 100% over a five-year period prior to the study's publication.<sup>39</sup> The largest retailers in that market generated \$2.6 billion in sales in 2016. A consumer survey prepared for the same study showed nearly half of the respondents had enrolled in at least one negative option subscription, while 35% enrolled in three or more.<sup>40</sup> PDMI also noted the study demonstrates consumers' familiarity with these programs and their embrace of "the benefits such plans provide including convenience, lower cost and the ability to try something for free before purchasing." PDMI suggested the number of such programs has likely increased since the study's completion. It also observed that negative option sales via mobile devices have increased in recent years, including the display of "shoppable ads" on most social media platforms. However, it cautioned against

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<sup>39</sup> See ESA.

<sup>40</sup> See Tony Chen, et al., *Thinking inside the subscription box: New research on e-commerce consumers* (Feb. 9, 2018), <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/thinking-inside-the-subscription-box-new-research-on-ecommerce-consumers>.

projecting the results. Given rapid changes in technology and advertising models in the digital space media, PDMI emphasized the difficulty of predicting “how consumers may choose to purchase goods and services even just a few years from now.” Finally, PDMI explained most negative options appear online, offering a wide array of products and services from major brands including “media services, meal preparation kits, shaving and beauty products, beer and wine, contacts and ordinary household consumables.”

***Prevalence of Deceptive Practices Generally:*** In addition to the sheer volume of negative option marketing, commenters identified evidence of ongoing, widespread deceptive practices. No commenter argued otherwise. TINA, for example, explained negative options are one of its top complaint categories. These complaints usually involve consumers who unwittingly enroll in programs and then find it difficult or impossible to cancel. In addition, NCL cited a 2017 national telephone survey commissioned by CreditCards.com finding 35% of U.S. consumers have enrolled in at least one automatically renewing contract without realizing it. Referring to another survey conducted in 2016, TINA noted that unwanted fees associated with trial offers and automatically renewing subscriptions ranked as “the biggest financial complaint of consumers.”<sup>41</sup>

The State AGs also detailed specific deceptive or unfair practices they see regularly, including the “lack of informed consumer consent, lack of clear and conspicuous disclosures, failure to honor cancellation requests and/or refusal to provide refunds to consumers who unknowingly enrolled in plans.” They further explained the

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<sup>41</sup> See Rebecca Lake, *Report: Hidden Fees Are #1 Consumer Complaint*, mybanktracker.com (updated Oct. 16, 2018), <https://www.mybanktracker.com/money-tips/money/hidden-fees-consumercomplaint-253387>.

nature of the underlying products often fails to alert consumers of their enrollment in a negative option program. For instance, many offers involve credit monitoring or anti-virus computer programs costing less than \$20 a month and have no tangible presence for consumers. The State AGs explained that consumers are often unaware of having ordered these products, never use them, and never notice them on their bills. The State AGs further explained these transactions often pull consumers into a stream of recurring payments by obtaining credit card information to ostensibly pay for a small shipping charge. As a result, many “consumers have been billed for such services for years before discovering the unauthorized charges.”

Commenters also noted the ongoing enforcement efforts and litigation in recent years involving negative option marketing. In addition to FTC cases, TINA stated that more than 100 federal class actions involving various negative option terms and conditions have been filed since 2014. Notwithstanding these actions, according to TINA, “the incidence of deceptive negative option offers continues to rise.” Citing the increase in consumer complaints and consumer harm in recent years, Representative Takano stated, “deceptive online marketing and unclear recurring payment plans are leaving too many consumers on the hook for products they may not want or even know they purchased.”<sup>42</sup>

In addition to inadequate disclosures and consent procedures, commenters stated some businesses continue to thwart consumers’ efforts to cancel recurring payments. NCL cited the 2017 CreditCards.com survey finding nearly half of all respondents (42%)

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<sup>42</sup> Congressman Mark Takano represents California’s 41st District in the United States House of Representatives.

complained about “the level of difficulty companies have created for the contract/service cancellation process.”<sup>43</sup> Further, consistent with the Commission’s enforcement history, the State AGs explained many harmful unfair or deceptive practices involve the failure to provide “consumers with a simple cancellation method.” NCL added some companies hide behind complex procedures “to prevent cancellation while others surprise consumers with price increases or contract renewals.” The State AGs stated the sellers often deny consumers refunds and force them “to pay to return the unordered goods.” Finally, Hoofnagle concluded businesses make cancellation difficult in order to raise consumer transaction costs and deter them from ending the contract. “To put this in another perspective,” he wrote, “companies would never put such transaction costs in the way of a purchase option.” Noting numerous complaints from consumers stymied in their efforts “through long telephone hold times and otherwise,” the State AGs also explained that current practices often require consumers to cancel using a different method than the one used to sign up for the program. Further, they often force consumers to listen to multiple upsells before allowing cancellation.

***Specific Problems with Free Trials:*** Several commenters noted particular problems with free trials or trial conversions. According to the State AGs, advertisements for free-to-pay conversion offers often lure consumers by promising a “free” benefit while failing to clearly and conspicuously disclose future payment obligations. These offers sometimes include information to distract consumers from reading the actual purchase terms. The State AGs report these deceptive practices are “rampant online and

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<sup>43</sup> Brady Porche, *Poll: Recurring charges are easy to start, hard to get out of*, Creditcards.com (Aug. 22, 2017), <https://www.creditcards.com/credit-card-news/autopay-poll.php>.

throughout social media.” These agencies further state, “trial conversions are rife with the potential for abuse and deception,” as companies induce consumers with offers that imply no obligation.

Despite current requirements such as ROSCA, the State AGs observed sellers still often fail to clearly and conspicuously disclose recurring payment obligations incurred by consumers who sign up for these trials. In addition, to gain access to consumer accounts, sellers often charge a small shipping fee for the “free trial” and obtain credit card information in the process. Consumers confronting these sellers often face fees to return the unordered goods and have difficulty obtaining refunds and cancelling their subscriptions.

Additionally, as commenters correctly noted, FTC complaint data indicates substantial problems with free trial marketing. According to NCL and TINA, a Better Business Bureau study of FTC data titled “Subscription Traps and Deceptive Free Trials Scam Millions with Misleading Ads and Fake Celebrity Endorsements” demonstrated complaints about free trials doubled between 2015 and 2017, with complaints during the period reaching nearly 37,000 and losses totaling more than \$15 million. The BBB study, which the State AGs also cited, shows losses in FTC “free trial offer” cases exceeded \$1.3 billion (over the ten years covered by the study). NCL stated that, according to the BBB, the average consumer loss for a free trial is \$186.<sup>44</sup>

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<sup>44</sup> Steve Baker, *Subscription traps and deceptive free trials scam millions with misleading ads and fake celebrity endorsements*, Better Business Bureau (Dec. 2018), <https://www.bbb.org/globalassets/local-bbbs/council-113/media/bbb-study-free-trial-offers-and-subscription-traps.pdf>.

Other studies reveal similar trends. TINA noted the FBI's Internet Crime Complaint Center recorded a rise in complaints about free trial offers, growing from 1,738 in 2015 to 2,486 in 2017, with losses totaling more than \$15 million. Similarly, a 2019 Bankrate.com survey cited by NCL found that 59% of consumers have signed up for "free trials" that automatically converted into a recurring payment obligation "against their will." In NCL's view, these data point to "a troubling, and costly problem for American consumers."

***Ongoing Law Enforcement Efforts:*** The State AGs detailed dozens of enforcement actions taken in recent years to address the proliferation of deceptive negative option claims. According to these agencies, their actions "demonstrate that problems persist in this area and that additional regulatory action is needed." For example, over the last decade, New York alone has reached 23 negative option settlements involving a variety of products and services such as membership programs, credit monitoring, dietary supplements, and apparel. These cases have garnered over \$10 million in consumer restitution and \$14 million in penalties, costs, and fees. The State AGs also described several of the larger settlements reached through multistate investigations, as well as from individual states, involving negative option offers for products and services such as satellite radio, social networking services, language learning programs, security monitoring, and dietary supplements. They also recounted representative stories of consumers who ordered what they thought were free, no-obligation samples but found themselves enrolled in costly programs. The Commission's recent cases in this area address many, if not all, of the same concerns.

### **C. Opposition to New Requirements**

No commenter opposed the existing Rule, which applies only to prenotification plans. ANA, for example, noted it provides consumers with transparency regarding material terms of marketed advance consent plans and choices regarding which products or services they want to receive. The Rule also provides “businesses flexibility to engage in marketing that benefits consumers.” In addition, ANA stated it enables consumers to purchase goods and services over time and gain exposure to “new, exciting, and useful products and services to which they likely would not have been exposed in the absence of advanced consent arrangements.”

Industry members generally opposed any new regulatory provisions for negative option marketing, arguing existing laws are adequate.<sup>45</sup> According to these commenters, current requirements provide adequate consumer protections, and enforcement agencies possess ample tools to address deceptive practices. The current framework furnishes, in MPA’s words, “a sweeping landscape of federal and state laws that govern such programs, including ROSCA, the TSR, EFTA, and the [Unordered Merchandise Statute].” SCIC added that new credit card rules from MasterCard and Visa contain compliance requirements for auto renewal programs and thus augment the existing regulatory framework. As ESA explained, existing laws “are thorough and allow businesses the flexibility to craft messages and operational procedures” based on their customers, the message’s medium, available technologies for consent, and cost-effective cancellation methods. In ANA’s view, since “violations of the various standards are heavily enforced,” additional requirements would fail to “prevent bad and dishonest actors from behaving unfairly or deceptively in the marketplace.” Finally, some

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<sup>45</sup> See ANA, RESA, MPA, PostCom, RI, SCIC, DiMA, ESA, and the Alliance.

commenters suggested the number of actions the FTC has brought in recent years demonstrates the agency already has adequate law enforcement tools to combat deceptive negative option marketing.<sup>46</sup>

Industry members also cautioned that new regulations might diminish the benefits provided by negative option offers and hamper innovation.<sup>47</sup> For example, ESA argued current law enforcement requirements adequately address “deceptive or abusive negative option practices” without overly burdensome new regulation. Others, like DIMA and MPA, warned new regulations using a restrictive “one-size-fits-all model” would ultimately harm consumers because, for example, they would restrict marketers’ ability to tailor their offers to consumers’ wishes. MPA also noted an expanded Rule might overburden legitimate businesses to consumers’ detriment while failing to halt specific problems already subject to existing federal statutes, FTC rules, and state laws.<sup>48</sup>

These commenters also cautioned against adding regulations absent sufficient information about problematic practices. Specifically, the Alliance recommended the FTC refrain from imposing new requirements without “clear evidence of a significant problem justifying such measures.” Similarly, ANA asked FTC to identify a “clear

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<sup>46</sup> See ESA, ANA, MPA.

<sup>47</sup> Two commenters specifically argued any new rule should avoid creating duplicative requirements for their members. First, SCIE, which represents service contract companies, argued state agencies typically regulate their members, and any new FTC rule should avoid any duplicative or potentially conflicting requirements. Similarly, the App Association urged the Commission to consider “excluding software apps and digital platforms” from expanded requirements “until there is an adequate evidence base demonstrating that its extension to the app economy is appropriate, as part of its scaled, flexible approach to implementing ROSCA.”

<sup>48</sup> See also ANA.



record” of perceived harms so that businesses can provide meaningful comments and clearly identify any gaps in the regulations.

#### **D. Concerns About Existing State Requirements**

Many industry commenters also stated a growing number of state laws address many forms of negative option marketing. According to PDMI, for example, there are currently at least 18 state laws, and many more are sure to follow.<sup>49</sup> Notable among these is California’s negative option statute, which addresses disclosures, consent, and accessible and cost-effective cancellation. Virginia has a similar law that provides civil penalties of \$5,000 per violation, as well as a private right of action. ESA complained many of these state laws “have imposed unique and inconsistent requirements” on marketers. PDMI noted, for instance, Florida, Hawaii, and New Mexico laws reference inconsistent renewal periods (six, one, and two months, respectively). Other states have differing requirements for notifications prior to the renewal period (*e.g.*, Florida (30-60 days); New York (15-30 days); North Carolina (15 to 45 days)).<sup>50</sup>

Several industry commenters emphasized these inconsistent state requirements create problems. PDMI, for example, explained they impose “a considerable burden on

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<sup>49</sup> See, ANA, ESA, PDMI, SCIC, MPA, TINA. Examples of state laws include: California (Cal. Bus. & Prof. Code secs. 17600-17606), Vermont (9 V.S.A. sec. 2454a); District of Columbia (D.C. Code secs. 28A-201 to 28A-204); Florida (Fla. Stat 501.165); Hawaii (Haw. Rev. Stat. sec. 481-9.5); North Carolina (N.C. Gen. Stat. sec. 75-41); and New York (N.Y. Gen. Oblig. Law sec. 5-903(2)).

<sup>50</sup> RESA also asked the Commission to exclude from its rule any activities “already regulated by state public service commissions” such as competitive retail electricity and natural gas suppliers. ACIC explained that many of these state laws exempt contracts that renew for a period of a month or less and instead focus on longer term renewing contracts. Additionally, many states have elected to exempt contracts that consumers may cancel at any time with a pro rata refund required to be provided to the consumer upon cancellation.

companies that utilize negative option marketing, particularly small businesses.” The lack of uniformity requires some companies to create “multiple different order pathways and disclosures” for consumers in different states. For example, many marketers must fashion a single “order experience” and set of disclosures that comply with the most restrictive law. According to PDMI, the continued proliferation of differing state requirements has made an onerous and burdensome compliance process even worse. For example, while California’s automatic renewal law appears most burdensome to many, Vermont’s recent statute is more restrictive in certain aspects (*e.g.*, consent requires consumers to check a box). In addition, the District of Columbia now requires a seller to obtain separate affirmative consent before a free trial converts to a paid subscription. PDMI explained compliance issues could lead to contract avoidance and potential exposure in class action litigation.

PDMI argued these various state laws have not helped consumers. Its members’ anecdotal observations suggest little difference in results, such as cancellation rates, between states with differing degrees of restrictive requirements. In its view, these observations may indicate consumers have become generally familiar with negative option programs. At the same time, it contended the more restrictive state laws have imposed significant compliance costs while offering little actual consumer benefit. Thus, PDMI believes consumers and businesses would benefit from a single FTC Rule that preempts state regulation in this area. ESA agreed, explaining that if “FTC regulations in the negative option space could have a preemptive effect,” it would be interested in “exploring a uniform regime that allows for growth and flexibility in the industry, much as the current framework permits.”

In contrast, MPA argued that an expanded FTC Rule would layer on top of the existing “patchwork” and fail to provide a consistent legal framework for industry and consumers. In its view, “publishers should be afforded the flexibility to tailor their subscription offers to their readers within the bounds of existing laws.”

Finally, TINA argued the proliferation of state requirements, as well as MasterCard and Visa’s new rules, reflect “an attempt to fill the gap in federal enforcement.”<sup>51</sup> According to TINA, the resulting collection of state rules and credit card policies leaves consumers with different levels of protection depending on where they live or what credit card they use. Thus, in TINA’s opinion, “the uniform protection” an updated FTC Rule “can offer is much needed.”

#### **E. Need for Additional Consumer Education**

Several commenters suggested the Commission focus on improving existing consumer education efforts.<sup>52</sup> ESA recommended updated industry guidance and additional consumer education in lieu of issuing new regulatory requirements. However, other commenters argued the Commission should not rely on consumer education alone. Hoofnagle, for example, described consumer and business education as “an uneconomical” tool for addressing problems associated with negative options. He explained that such education must compete “with hundreds of” other consumer priorities, from “organic food labeling to energy efficiency ratings,” and creates direct and indirect costs, including consumer time, potential consumer confusion, and even

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<sup>51</sup> See, e.g., MasterCard, “*Transaction Processing Rules*,” at <https://www.mastercard.us/content/dam/public/mastercardcom/na/global-site/documents/transaction-processing-rules.pdf>.

<sup>52</sup> See DiMA, ESA.

misapprehension. The State AGs, who supported education initiatives, similarly warned, “such efforts will likely reach only a small fraction of the consuming public.” Thus, they recommended the Commission use its authority to issue “clear-cut rules” to help companies avoid deceptive marketing practices that “have caused, and continue to cause, substantial consumer harm.”

#### **F. Limitations of Existing Requirements**

Several commenters discussed the limitations of existing requirements. For example, the State AGs discussed ROSCA’s shortcomings, arguing while the statute has helped combat abuses over the Internet, it “lacks specificity as to how informed consent should be obtained or how clear and conspicuous disclosures should be made.” They also noted ROSCA does not provide “any concrete, bright line requirements that allow enforcement agencies to readily identify violations.” Given existing limitations, the State AGs concluded new regulatory provisions are necessary to establish specific, clear rules to help businesses’ compliance efforts and to allow states to easily identify nonconforming practices. TINA also asserted ROSCA and FTC requirements lack needed specificity regarding cancellation requirements, noting ROSCA only directs marketers to provide “simple mechanisms for a consumer to stop recurring charges.” In contrast, PDMI said the concept of simple cancellation is well understood by sellers in the marketplace.

#### **G. Support for New Regulations**

Several commenters supported additional FTC regulations to address negative option marketing.<sup>53</sup> The State AGs, for example, strongly urged the Commission to

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<sup>53</sup> NCL, Oakley, TINA, State AGs, PDMI, Takano, and Hoofnagle.

expand the existing Rule or issue new regulations “to combat deceptive and unfair marketing . . . in all forms of negative option marketing, with additional provisions to address issues that arise with respect to trial conversion offers.” Similarly, commenter Oakley recommended “very strong regulations to stop companies from signing people up for unwanted products/services.” PDMI, an industry group, favored amending the Rule to broaden its “scope to apply to all forms of negative option marketing.” In its view, such a rule “would provide greater protection to consumers, would enhance business compliance and would lower overall compliance costs.” PDMI also opined that “consumers and business would benefit from federal preemption of state law regulation in this area.” Representative Takano concluded, “it is time we update the tools and policies designed to ensure companies no longer profiteer through these deceptive practices.” TINA added the Rule needs updates to ensure both consumers and businesses obtain the full benefits of negative options. It further argued the current requirements leave consumers vulnerable and provide incentives for businesses to “silently hope consumers forget about them.” It predicted that, without changes to the Rule, the trend of deceptive trial offers and subscriptions will continue to grow. In TINA’s opinion, updates would “be minimally burdensome to companies” because they would merely require businesses to be “forthcoming and straightforward” with their customers.

***Scope:*** Commenters supporting new provisions generally recommended the Commission expand the Rule’s existing regulatory scope to cover all negative option marketing methods in all media, and consolidate requirements.<sup>54</sup> The State AGs identified unfair or deceptive practices, such as those associated with free trials, which

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<sup>54</sup> See, e.g., State AGs, PDMI, and TINA.

occur in the marketplace but are not covered by the current Negative Option Rule. They also suggested free-to-pay solicitations deserve closer scrutiny than other negative option features due to the longstanding evidence of deceptive tactics, prevalence of consumer complaints about unauthorized charges, and consumer risks associated with these offers.

PDMI agreed a consolidated Negative Option Rule would provide a significant benefit. It explained having requirements in “five different places” imposes burdens on both consumers and businesses and heightens the risk of inadvertent non-compliance. Scattered requirements also create a “trap for the unwary for businesses who do not realize that they must ferret out” applicable mandates across “a wide swath of the federal regulatory landscape.” According to PDMI, consolidation of negative option marketing into a single rule would minimize burdens on marketers, reduce consumer confusion, and enhance compliance. Therefore, PDMI recommended the FTC revise its Rule to include all negative option types and to include ROSCA’s three core provisions regarding notice, consent, and cancellation. In its view, “this would provide a solid foundation for protecting consumers and providing businesses with one uniform set of requirements that can be easily and consistently implemented across all channels and markets.”

*Need for Flexibility:* Several commenters urged the Commission to employ a flexible approach that accounts for technological changes. They cautioned overly prescriptive rules would jeopardize the consumer benefits of negative options and harm the businesses that provide them.<sup>55</sup> MPA, for example, stated the FTC should not micromanage “lawful business conduct” because such an approach would neither enhance business compliance nor benefit consumers. Several commenters raised concerns

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<sup>55</sup> See, e.g., App Association, ESA, and ANA.

about overly prescriptive regulatory requirements because a “one size fits all” approach reduces flexibility and hampers innovation. For example, according to ESA, new regulations would likely create standardization that “is unworkable across all industries, media, and technology.” It added an effort to account for all the various iterations of a subscription offer or sales medium would be impractical or unreasonable. Finally, SCIC noted that FTC staff has emphasized the need for marketers to be “free to use their many tools of creativity to figure out the best way to convey that information.”

According to PDMI, rules “need to be sufficiently fluid to permit marketers to adapt their offerings” to current and future media channels. It explained that market changes occur too quickly for any Commission rule to stay apace. Therefore, PDMI strongly urged the Commission to follow its historical “performance” standard approach and “avoid dictating precisely how disclosure must be made, consent must be obtained, or cancellation methods must be implemented.” For instance, it recommended leaving terms such as “clear and conspicuous” and “express informed” consent undefined to “preserve flexibility in the face of rapidly changing technology” and ensure meeting the FTC’s goals without rigid restrictions.

***Important Information:*** Beyond the need for flexibility, the commenters provided specific disclosure recommendations. NCL, for example, suggested the Rule require businesses “to clearly and conspicuously disclose their renewal terms prior to the entry of payment information.” It also recommended the Commission incorporate the “clear and conspicuous” definition from both California’s and the District of Columbia’s automatic renewal statutes. In NCL’s view, these disclosures should specifically include cancellation instructions and deadlines, renewal dates, contract length, amendment

notifications, renewal costs, contract changes at renewal, and business contact information. Hoofnagle asserted sellers also should provide a total cost disclosure so consumers understand what they will be paying each year, as opposed to monthly.

NCL also argued the Rule should require marketers to send notifications electronically, and, for contracts of six months or more, by postal mail, with links, phone numbers, and prepaid postcards appropriate to the medium. The State AGs urged the Commission to require important disclosures (*e.g.*, billing information and requests for acceptance) on a separate page free of “any other information that may serve as a distraction.”

***Consent:*** Commenters offered a variety of suggestions regarding possible consent requirements. The State AGs recommended requiring “consumers to take a separate, affirmative action” to consent to negative option features, such as “clicking an ‘I Agree’ button to accept the trial product” accompanied by disclosures about the “terms of the offer, including the amount and frequency of payments.” The State AGs and TINA recommended requirements directing businesses to obtain consent after the trial period expires. TINA noted the District of Columbia now requires companies offering free trials of a month or more to notify consumers between one and seven days before the expiration of the free trial and obtain affirmative consent to the renewal prior to charging consumers.

As described above, the App Association suggested the Commission provide flexibility in any new regulations, but particularly those involving consent. It advocated for a “flexible and outcome-driven regulatory environment” that would allow small businesses to create “the best way for their company to implement this specific



requirement” and “encourage new innovative approaches in consumer transparency.”

Given the likelihood of future technological changes (*e.g.*, faster devices that consumers will want to use quickly), the App Association suggested any new FTC provisions include “flexible yet stable requirements that protect the consumer’s right to choose but at the same time do not stifle innovation.”

**Cancellation:** Several commenters provided specific recommendations for new cancellation rules, including, for example, that the FTC require businesses to provide a cancellation mechanism that mirrors the customer’s method of enrollment.<sup>56</sup> TINA explained consumers should be able to cancel their negative options in “an easy and specific manner” using procedures that are “at least as easy as the subscription process.” In its view, at a minimum, if a consumer subscribed online, they should be able to cancel online. The lack of such specific requirements leaves consumers vulnerable to a company’s interpretation of what “simple” might mean under ROSCA. It also urged the Commission to consider Visa’s new rules requiring businesses to provide an “easy way to cancel the subscription” online, similar to unsubscribing from an email distribution list. TINA additionally noted California’s new rule mandating an easy-to-use cancellation mechanism online, such as a termination email. The State AGs similarly recommended the FTC require “that consumers be allowed to cancel their memberships by the same method as their enrollment (as well as by other methods, at the business’s option).” The App Association, however, urged flexibility in any new cancellation requirements and cautioned against “overly-prescriptive approaches.” Instead, it recommended FTC allow

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<sup>56</sup> Takona and TINA.

“marketers to decide how to implement their own notification system to stop reoccurring charges,” and to efficiently scale approaches based on consumer expectations and needs.

Hoofnagle, who discussed the negative impacts of abusive cancellation procedures, suggested the Commission prohibit certain specific “transaction costs” imposed on some consumers. Such practices include requiring users to repeatedly request cancelling, to sign in with additional security (*e.g.*, requiring a CAPTCHA completion), to accept third-party scripting, and to re-enter information such as a credit card number. Hoofnagle agreed with other commenters that “cancellation should never be more transactionally burdensome than enrollment” and there should be “symmetry between purchase and cancel.” He also recommended the FTC consider a “one-time ‘no’ rule” to require marketers to accept a consumer’s first “cancel” request and end the transaction without trying to convince the consumer to change their minds or pitching further offers.

***Material Changes:*** Commenters also recommended requirements to address material changes to contract conditions after the consumer enrolls, including changes to price, service, goods, and other material terms. According to TINA, for example, the FTC should require businesses to notify consumers of such changes and provide them an opportunity to cancel before the terms take effect. TINA stated current FTC requirements, as well as ROSCA, do not address “instances in which the terms may change.” Several states, including Virginia, California, and Oregon, require businesses to provide consumers with a clear and conspicuous notice of the material change as well as

information about how to cancel “in a manner that is capable of being retained by the consumer.”<sup>57</sup>

**Reminders:** Commenters also recommended requiring businesses to provide additional reminders as part of their negative option offerings.”<sup>58</sup> For example, TINA supported imposing a notice requirement prior to subscription expiration containing cancellation instructions similar to VISA’s new rules. Those rules require an electronic reminder, sent to consumers a week before the trial period expires, with a link to an online cancellation page. TINA also argued for regular, ongoing notice of the agreement terms along with cancellation instructions. In its view, “such a requirement is important to protect consumers from paying for products or services they do not want or need.” According to Representative Takano, such reminders “will help decrypt the complex nature of negative option agreements” and ensure businesses cannot continue to charge consumers who intended to make only a single purchase.

The State AGs agreed, explaining periodic disclosures ensure consumers are aware of recurring charges and “help prevent the continuation of unknowing or unwanted enrollment in these plans.” They recommended notifications at regular intervals for month-to-month plans, with appropriately worded subject lines (*e.g.*, “Important Billing Information”), coupled with a convenient cancellation method. For services that renew annually, the State AGs contended that, before charging for renewal, companies should notify consumers within a specified period about the timing, amount, and billing method

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<sup>57</sup> TINA also noted that a bill introduced into the House in 2019, the Unsubscribe Act (H.R. 2683), contains similar requirements. *See also* Takano, NCL, and Hoofnagle. For free trials, NCL argued the Rule should require marketers to obtain express consent before increasing the price of service for an established customer.

<sup>58</sup> TINA, Takano, and State AGs.

along with convenient cancellation procedures. Finally, both the State AGs and Hoofnagle suggested the FTC consider whether periods of consumer inactivity (*e.g.*, 24 months) for a subscribed service should trigger notifications.

***Miscellaneous Recommendations:*** The commenters provided several other recommendations for new requirements, including provisions involving refunds, consumer contact information, deletion of consumer data, and amendments to the TSR. First, the State AGs proposed requiring businesses to provide full refunds to consumers “unwittingly enrolled in a negative option plan.” Second, they suggested the Rule require businesses to obtain a consumer’s email address at the initial consent and send a confirmatory email describing the service or product, the amount and timing of any payments, the payment collection method, and a toll-free cancellation number. For offers involving goods, the State AGs stated businesses should include an invoice in every shipment containing the seller’s name and address, the negative option program terms, return instructions, and a toll-free phone number or email address for cancellation. Third, Hoofnagle asserted a rule should require consumer data deletion after “a reasonable amount of time” to provide customers with a “true exit” from the transaction. Fourth, the State AGs urged the Commission to amend and expand the TSR’s negative option provisions to require sellers to record entire customer transactions and retain such recordings for a specified period. In addition, they recommended the TSR require marketers to provide full refunds in response to complaints unless the company can provide a phone call recording “establishing the consumer’s affirmative consent.”

***Banning Certain Enrollment Methods:*** The State AGs suggested the Commission limit, or prohibit, certain types of negative option marketing that are, in their

opinion, “inherently unreliable.” First, they suggested a ban on “free-to-pay conversion programs” (*e.g.*, free trial magazine subscriptions) to consumers at retail checkout in brick-and-mortar stores. According to the State AGs, cashiers fail to disclose the material terms and conditions of these offers, including the fact that consumers will receive a monthly bill after the trial ends. Retailers use the consumer’s signature authorizing the entire purchase (*e.g.*, groceries, etc.) as consent for the negative option program, and then rely on “inconspicuous” terms on the sale receipt as evidence of consent. The State AGs identified this practice as an “inherently unreliable means of obtaining consumers’ informed consent and should be prohibited.”

Second, the State AGs urged the Commission to ban the use of consumers’ check endorsements to obtain consent to be periodically billed for goods or services. They asserted this practice has led to widespread fraud. Specifically, some businesses send consumers checks for small dollar amounts that appear to come from a familiar company. Small print disclosures near the endorsement line on the reverse of the check indicate that, by cashing the check, consumers are enrolling in a recurring payment program. According to the State AGs, this practice, which has generated many complaints, “is inherently unreliable and should be prohibited” because consumers do not scrutinize the small print on the back of these checks and thus have no reason to expect their signature is consent for a recurring payment program.

Finally, the State AGs argued, without further explanation, the FTC Rule should either ban or place restrictions on “upsell offers that the consumer must respond to before being able to cancel.”

**X. Prevalence of Deceptive or Unfair Practices Involving Negative Option Marketing and the Need for the Proposed Amendments**

Consistent with the Commission’s past conclusions, the recent comments confirm that deceptive practices involving negative option marketing remain prevalent and that additional requirements are needed to protect consumers. In 2014, the Commission found “that unfair, deceptive, and otherwise problematic negative option marketing practices continue[d] to cause substantial consumer injury, despite determined enforcement efforts by the Commission and other law enforcement agencies.”<sup>59</sup> The evidence since indicates matters have not improved, and, in fact, may be worse. As detailed in Section IX, the commenters provided substantial evidence—in the form of complaint data, studies, survey results, and law enforcement actions—demonstrating deceptive negative option marketing practices remain prevalent. The FTC, the states, and consumer organizations continue to receive thousands of complaints from consumers who unwittingly enrolled in programs and then find it difficult or impossible to cancel. Additionally, studies cited by commenters confirm a pattern of consumer ensnarement in unwanted recurring payments. Commenters also highlighted the many recent federal and state enforcement actions related to negative options, as well as nearly 100 class action cases filed in the last six years.

The Commission and the states continue to regularly bring cases challenging negative option practices. These matters involve a range of deceptive or unfair practices, including inadequate information regarding free trials and other products or programs, enrollment without consumer consent, and inadequate or overly burdensome cancellation

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<sup>59</sup> 79 FR 44271, 44275 (July 31, 2014).

and refund procedures.<sup>60</sup> The existence of these cases and complaints demonstrates that some commenters' contention that all the problems are being addressed is simply not true. In fact, given the considerable limitations of FTC and state enforcement resources, these law enforcement actions likely represent only the tip of the iceberg—a conclusion corroborated by the complaint and survey evidence in the record.

In the ANPR, the Commission explained it receives thousands of complaints a year related to negative option marketing. In addition, State AGs and other commenters detailed ongoing problems with inadequate disclosures, the failure to obtain consent, poor or nonexistent cancellation procedures, and the refusal to honor cancellation requests and refund demands. They further explained deceptive free trial offers are “rampant online and throughout social media,” and often lure consumers into recurring payments without clearly and conspicuously disclosing future payment obligations.<sup>61</sup> The evidence offered by commenters also demonstrates many sellers do not provide consumers with simple cancellation methods and, instead, create obstacles, such as long telephone hold times or

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<sup>60</sup> Examples of these matters include: *FTC v. Triangle Media Corp.*, No. 3:18-cv-01388-LAB-LL (S.D. Cal. 2019); *FTC v. Credit Bureau Ctr., LLC*, No. 17-cv-00194 (N.D. Ill. 2018); *FTC v. JDI Dating, Ltd.*, No. 1:14-cv-08400 (N.D. Ill. 2018); *FTC v. One Techs., LP*, No. 3:14-cv-05066 (N.D. Cal. 2014); *FTC v. Health Formulas, LLC*, No. 2:14-cv-01649-RFB-GWF (D. Nev. 2016); *FTC v. Nutraclick LLC*, No. 2:16-cv-06819-DMG (C.D. Cal. 2016); *FTC v. XXL Impressions*, No. 1:17-cv-00067-NT (D. Me. 2018); *FTC v. AAFE Products Corp.*, No. 3:17-cv-00575 (S.D. Cal. 2017); *FTC v. Pact Inc.*, No. 2:17-cv-1429 (W.D. Wash. 2017); *FTC v. Tarr*, No. 3:17-cv-02024-LAB-KSC (S.D. Cal. 2017); *FTC v. AdoreMe, Inc.*, No. 1:17-cv-09083 (S.D.N.Y. 2017); *FTC v. DOTAuthority.com, Inc.*, No. 0:16-cv-62186-WJZ (S.D. Fla. 2018); *FTC v. Bunzai Media Group, Inc.*, No. CV15-04527-GW(PLAx) (C.D. Cal. 2018); and *FTC v. RevMountain, LLC*, No. 2:17-cv-02000-APG-GWF (D. Nev. 2018).

<sup>61</sup> State AGs.

multiple upsells, to impede consumers from terminating their contracts. These practices are further reflected in the Commission's recent cases.<sup>62</sup>

## **XI. Proposed Amendments – Objectives and Content**

To address these ongoing problems, the Commission proposes to amend the current Negative Option Rule with the objective of setting clear, enforceable performance-based requirements for all negative option features in all media. The proposed amendments are designed to ensure consumers understand what they are purchasing and allow them to cancel their participation without undue burden or complication. As discussed below, the proposed Rule (retitled “Rule Concerning Recurring Subscriptions and Other Negative Option Plans”) addresses the most important issues related to negative option marketing, including misrepresentations, disclosures, consent, and cancellation. These proposed changes, which replace existing provisions in the Rule, enhance and clarify existing requirements currently dispersed in other rules and statutes. They also consolidate all requirements, such as those in the TSR, specifically applicable to negative option marketing. Further, the proposed Rule would allow the Commission to seek civil penalties and consumer redress in contexts where such remedies are currently unavailable, such as deceptive or unfair practices involving negative options in traditional print materials and face-to-face transactions (*i.e.*, in media not covered by ROSCA or the TSR) and misrepresentations (which are not expressly covered by ROSCA, even when on the Internet).

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<sup>62</sup> See, e.g., *FTC v. Triangle Media Corp.*, No. 3:18-cv-01388-LAB-LL (S.D. Cal. 2019); *FTC v. AdoreMe, Inc.*, No. 1:17-cv-09083 (S.D.N.Y. 2017); and *FTC v. One Techs., LP*, No. 3:14-cv-05066 (N.D. Cal. 2014).



In developing this proposal, and consistent with concerns raised in the comments, the Commission sought to enhance consumer protections while avoiding detailed, prescriptive requirements that would impede innovation. By generally proposing flexible standards, the Commission seeks to establish rules that will not impede advances or become irrelevant as the market changes, while protecting consumers from widespread deceptive or unfair practices.

**Coverage:** The Commission proposes eliminating the current Rule’s prescriptive requirements applicable to prenotification plans and replacing them with the flexible, but enforceable, standards detailed below. The proposed requirements would apply to all forms of negative option marketing, including prenotification and continuity plans, automatic renewals, and free trial offers.<sup>63</sup> This expanded coverage would establish a common set of requirements applicable to all types of negative option marketing.

The proposed Rule defines “negative option feature” to mean a contract provision under which the consumer’s silence or failure to take affirmative action to reject a good or service or to cancel the agreement is interpreted by the negative option seller as acceptance or continuing acceptance of the offer. This definition is consistent with the TSR and ROSCA (which references the TSR’s definition of negative option). The

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<sup>63</sup> The proposed Rule would apply to “negative option sellers,” which are defined in the proposal as persons selling, offering, promoting, charging for, or otherwise marketing a negative option feature. With certain exceptions, the FTC Act provides the agency with jurisdiction over nearly every economic sector. Certain entities or activities are wholly or partially exempt from FTC jurisdiction under the FTC Act, including most depository institutions, non-profits, transportation and communications common carriage, and the business of insurance. For instance, under Sections 4 and 5 of the FTC Act, the Commission’s jurisdiction does not apply to non-profit organizations generally, but it does extend to non-profits that provide economic benefits to their for-profit members, e.g., trade and professional associations. *See California Dental Ass’n v. FTC*, 526 U.S. 756 (1999).

proposed term includes, but is not limited to, automatic renewals, continuity plans, free-to-pay conversion or fee-to-pay conversions, and pre-notification negative option plans..<sup>64</sup> Additionally, the proposed Rule covers offers made in all media, including Internet, telephone, in-person, and printed material. The Commission's experience, confirmed by many commenters, demonstrates that negative option features pose the same risks across media and sales methods. The amendments would establish a comprehensive scheme for regulation of negative option marketing in a single rule, thus consolidating existing negative option-specific provisions in one location. This change will facilitate compliance by providing one-stop regulatory shopping, as noted by the State AGs and PDMI.

***Misrepresentations:*** Section 425.3 of the proposed Rule prohibits any person from misrepresenting, expressly or by implication, any material fact regarding the *entire* agreement – not just facts related to a negative option feature. FTC enforcement experience demonstrates misrepresentations in negative option marketing cases continue to be prevalent and often involve deceptive representations not only related to the negative option feature but to the underlying product (or service) or other aspects of the transaction as well. Such deceptive practices may involve misrepresentations related to costs, product efficacy, free trial claims, processing or shipping fees, billing information use, deadlines, consumer authorization, refunds, cancellation, or any other material representation..<sup>65</sup>

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<sup>64</sup> Section II of this Notice contains descriptions of these various plans.

<sup>65</sup> See e.g., *FTC v. Tarr*, No. 3:17-cv-02024-LAB-KSC (S.D. Cal. 2017); *FTC v. First American Payment Systems*, Case 4:22-cv-00654 (E.D. Tex. 2022); *FTC v. XXL Impressions*, No. 1:17-cv-00067-NT (D. Me. 2018); *US v. MyLife.com, Inc.*, No. 2:20-

This provision falls within the Commission's Section 5 authority and its separate authority under ROSCA. The proposed provision provides the FTC with the ability to seek civil penalties and consumer redress for material misrepresentations in media other than telemarketing or the Internet. The record demonstrates this type of provision is necessary. Specifically, despite the Commission's current authority to obtain redress and injunctions under ROSCA and injunctive relief under Section 5 of the FTC Act, the Commission's many enforcement actions over the past several years have failed to stem the tide of deceptive negative option practices online and in person. Ensuring great relief against those who deceive consumers will benefit both consumers and honest sellers who must compete with those who engage in deception.

***Important Information:*** Section 425.4 of the proposed Rule requires sellers to provide the following important information prior to obtaining the consumer's billing information: 1) that consumers' payments will be recurring, if applicable, 2) the deadline by which consumers must act to stop charges, 3) the amount or ranges of costs consumers may incur, 4) the date the charge will be submitted for payment, and 5) information about the mechanism consumers may use to cancel the recurring payments.

The failure to provide this information is a deceptive or unfair practice. As detailed in the comments (e.g., TINA and State AGs), many sellers fail to provide

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CV-6692-JFW-PDx (C.D. Cal. 2021); *FTC and State of Maine v. Health Research Labs., LLC*, No. 2:17-cv-00467-JDL (D. Me. 2018); *FTC and State of Connecticut v. Leanspa, LLC*, No. 3:11-cv-01715-JCH (D. Conn. 2013); *FTC v. WealthPress, Inc. et al.*, No. 3:23-cv-00046 (M. D. Fla. 2023); *FTC v. BunZai Media Group, Inc.*, No. CV15-04527-GW(PLAx) (C.D. Cal. 2018); *FTC v. Willms*, No. 2:11-cv-00828 (W.D. Wash. 2011); *FTC v. Universal Premium Services*, No. CV06-0849 (C.D. Cal. 2006); *FTC v. Remote Response*, No. 06-20168 (S.D. Fla. 2006); and *FTC v. Jeremy Johnson, et al.*, No. 2:10-cv-02203 (D. Nev. 2016).

adequate disclosures, thereby luring consumers into purchasing goods or services they do not want. Moreover, the proposal is consistent with ROSCA, which requires sellers to clearly and conspicuously disclose “all material terms of the transaction before obtaining the consumer’s billing information.” Specifically, the proposed Rule, like ROSCA, would require sellers to disclose any material conditions related to the underlying product or service that is necessary to prevent deception, regardless of whether that term directly relates to the terms of the negative option offer.<sup>66</sup> Complementing ROSCA, the proposal also specifies the types of information sellers must provide so that they have more certainty and consumers receive the information they need to understand the terms of their enrollment. This provision is consistent with Commission orders in this area, requiring no more than any advertisement would need to be non-deceptive.

The proposal does not mandate a long list of prescriptive disclosures, such as renewal dates or business contact information, as some commenters suggested. There is an inherent tradeoff between providing consumers with additional information and ensuring they see and understand the information they need (*i.e.*, consumers may miss important information if the important points are surrounded by useful but less critical information).

Further, to help ensure consumers actually see and understand this important information, the proposed Rule contains general requirements for the location and form of the necessary information in written, telephone, and in-person offers. The FTC’s law enforcement experience and consumer complaints are replete with examples of hidden disclosures, including those in fine print, buried in paragraphs of legalese and sales

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<sup>66</sup> See *In re: MoviePass, Inc.*, No. C–4751 (Oct. 5, 2021).

itches, and accessible only through hyperlinks..<sup>67</sup> Making the rules of the road clear prevents deception by businesses trying to take advantage of the gray areas in current statutes and regulations; the possibility of civil penalties deters those who are engaging in fraudulent practices. Moreover, these clearer guidelines should level the playing field for legitimate businesses, freeing them from having to compete against those employing deception.

Specifically, consistent with the Commission’s Policy Statement, the proposed amendments require marketers to present this information “clearly and conspicuously,” a term defined in the proposed amendments. Under the proposal, this information should be difficult to miss (*i.e.*, easily noticeable) or unavoidable and easily understandable by ordinary consumers. In addition, all required information, regardless of media, should not contain any other information that interferes with, detracts from, contradicts, or otherwise undermines the ability of consumers to read, hear, see, or otherwise understand the required information, including any information not directly related to the material terms and conditions of any negative option feature. The proposed amendments also contain requirements related to visual, audible, and written disclosures consistent with the principles enunciated in the Policy Statement. For example, in any communication that is solely visual or solely audible, the disclosure should be made through the same means through which the communication is presented. Additionally, written disclosures should appear immediately adjacent to the means of recording the consumer’s consent for the negative option feature. Again, the Commission’s law enforcement experience as well as

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<sup>67</sup> See, e.g., *FTC v. Triangle Media Corp.*, No. 3:18-cv-01388-LAB-LL (S.D. Cal. 2019); *FTC v. Tarr*, No. 3:17-cv-02024-LAB-KSC (S.D. Cal. 2017); *FTC v. One Techns., LP*, No. 3:14-cv-05066 (N.D. Cal. 2014).

the comments demonstrate the need for this direction, which should benefit businesses who are trying to make non-deceptive claims by leveling the playing field.

Finally, the FTC’s comprehensive definition of “clear and conspicuous,” developed through years of enforcement experience, covers all the concepts provided in California and D.C. laws’ “clear and conspicuous” definitions with one exception. That exception, the fact that the D.C. definition requires that disclosures be visually proximate to any request for consumer consent, is incorporated by the proposed Rule in a separate consent section.<sup>68</sup>

**Consent:** Section 425.5 of the proposed Rule also requires negative option sellers to obtain consumers’ express informed consent before charging them. The failure to obtain such consent is a deceptive or unfair practice, and the record demonstrates how pervasive this problem has become.<sup>69</sup> Thus, the proposed consent requirements are necessary given how easily marketers can enroll consumers in negative option programs without actual consent.

Proposed Section 425.5 is consistent with ROSCA’s basic “express informed consent” requirement while providing more guidance on how to comply. This more detailed guidance removes ambiguity for marketers, while leveling the playing field and providing deterrence. Moreover, the provision provides flexibility to allow for innovation and change over time. The proposed Rule achieves these goals by requiring marketers to:

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<sup>68</sup> Cal. Bus. & Prof. Code § 17601 and D.C. Code § 28A–202.

<sup>69</sup> See, e.g., State AGs comments; *FTC v. Bunzai Media Group, Inc.*, No. CV15-04527-GW(PLAx) (C.D. Cal. 2018); *FTC v. Health Formulas, LLC*, No. 2:14-cv-01649-RFB-GWF (D. Nev. 2016); *FTC v. JDI Dating, Ltd.*, No. 1:14-cv-08400 (N.D. Ill. 2018); *FTC and State of Maine v. Health Research Laboratories, LLC*, No. 2:17-cv-00467-JDL (D. Me. 2018) (Section 5); *FTC v. XXL Impressions*, No. 1:17-cv-00067-NT (D. Me. 2018) (Section 5).

1) obtain the consumer’s unambiguously affirmative consent to the negative option feature separately from any other portion of the offer; 2) refrain from including any information that “interferes with, detracts from, contradicts, or otherwise undermines” the consumer’s ability to provide express informed consent; (3) obtain the consumer’s unambiguously affirmative consent to the entire transaction; and (4) obtain and maintain (for three years or a year after cancellation, whichever is longer) verification of the consumer’s consent.<sup>70</sup>

These requirements address commenters’ (e.g., TINA, Rep. Takano, and State AGs) concerns that many sellers employ inadequate consent procedures to increase enrollment in negative option programs. By providing more specificity regarding the steps sellers must take to ensure they obtain consumer consent, these provisions will also help address the deceptive use of so-called “dark patterns,” sophisticated design practices that manipulate users into making choices they would not otherwise have made.<sup>71</sup> Indeed, consumer agreement to any free-to-pay conversion or negative option feature or any other automatic renewal provision obtained through the use of deceptive or unfair dark patterns does not constitute express informed consent.

The provisions also address the unique challenges presented by negative option offers, even for marketers trying to comply with the law. Specifically, consumers can

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<sup>70</sup> The Commission seeks comment on whether the proposed Rule should contain a different recordkeeping period.

<sup>71</sup> The FTC recently released a report describing these practices, which include disguising ads to look like independent content, making it difficult for consumers to cancel subscriptions or charges, burying key terms or junk fees, and tricking consumers into sharing their data. *See Bringing Dark Patterns to Light*, FTC Staff Report (Sept. 2022), [https://www.ftc.gov/system/files/ftc\\_gov/pdf/P214800%20Dark%20Patterns%20Report%209.14.2022%20-%20FINAL.pdf](https://www.ftc.gov/system/files/ftc_gov/pdf/P214800%20Dark%20Patterns%20Report%209.14.2022%20-%20FINAL.pdf).

easily focus solely on the aspects of an offer that mirror the offers they regularly encounter (*e.g.*, the quality, functionality, one-time price of the item, and the availability of a free trial offer). Thus, many consumers think they are consenting to these core attributes but miss the other unusual price term—the negative option feature. The proposal addresses these issues by requiring marketers to obtain consent for the negative option feature separately from the rest of the offer and other parts of the transaction, thereby ensuring the consent is informed.<sup>72</sup> For instance, according to the comments, sellers offering negative option features through in-person transactions frequently use consumers’ signatures on the entire purchase as consent for the negative option. Further, in effect, the requirement for a separate negative option consent prohibits certain negative option enrollment methods, such as the use of retail sales receipts or check endorsements, in which the customer’s signature serves a dual purpose (*e.g.*, negative option enrollment and promotional check cashing). As commenters noted, such practices appear to be particularly attractive to those committing fraud. Finally, the Rule requires sellers to obtain consent for the entire transaction to ensure consumers also agree to elements of the agreement not specifically related to the negative option feature.<sup>73</sup>

To maintain consistency with the TSR, the proposed consent provision also contains a cross-reference to 16 CFR Part 310 to inform sellers of that regulation and includes specific mention of TSR requirements for consent in transactions involving

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<sup>72</sup> See, *e.g.*, *FTC v. Jason Cardiff (Redwood Scientific)*, No. ED 18-cv-02104 SJO (PLAx) (C.D. Cal. 2018); *FTC v. DOTAuthority.com, Inc.*, No. 0:16-cv-62186-WJZ (S.D. Fla. 2018); *FTC v. JDI Dating, Ltd.*, No. 1:14-cv-08400 (N.D. Ill. 2014).

<sup>73</sup> The Commission recently alleged that failure to disclose a material term of the underlying service that was necessary to prevent deception violated this provision of ROSCA. *In re: MoviePass, Inc.*, No. C-4751 (Oct. 5, 2021).



preacquired account information and a free-to-pay conversion.<sup>74</sup> However, beyond the basic steps discussed above and these current TSR requirements, the proposed consent requirements contain no prescriptive provisions requiring sellers to implement specific practices.

Instead, the proposed Rule provides guidance for sellers making written offers (including those on the Internet) to assure they have obtained the consumer's unambiguously affirmative consent. Specifically, for all written offers (including over the Internet), sellers may obtain express informed consent through a check box, signature, or other substantially similar method, which the consumer must affirmatively select or sign to accept the negative option feature, and no other portion of the offer.<sup>75</sup> This approach should protect consumers and marketers alike. Consumers are assured they pay for only the goods and services they choose, and marketers can opt for the certainty of avoiding liability by adhering to the Commission's proposed means of compliance. Alternatively, marketers are free to innovate as long as they meet the express informed consent standard.

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<sup>74</sup> 16 CFR 310(a)(7).

<sup>75</sup> To avoid potential conflicts with EFTA, this proposed provision does not apply to transactions covered by the preauthorized transfer provisions of that Act, 15 U.S.C. 1693e, and Regulation E, 12 CFR 1005.10. Those EFTA provisions, which apply to a range of preauthorized transfers including some used for negative options, contain various prescriptive requirements (*e.g.*, written consumer signatures that comply with E-Sign, 15 U.S.C. 7001-7006, evidence of consumer identity and assent, the inclusion of terms in the consumer authorization, and the provision of a copy of the authorization to the consumer) beyond the measures identified in the proposed Rule. Consequently, compliance with the proposed Rule would not necessarily ensure compliance with Regulation E. For example, use of a check box for consent without additional measures may not comply with Regulation E's more specific authorization requirements.

In the free trial context, while marketers must obtain consumers' express informed consent prior to being charged, the proposal does not require sellers to obtain an additional (or alternative) round of consent after the trial's completion. Although such additional consent would remind many consumers of their ongoing purchases, the failure to provide this second round of consent does not necessarily constitute an unfair or deceptive practice.<sup>76</sup> For example, if sellers follow the proposed Rule's disclosure and consent requirements, consumers should understand they are enrolled in, and will be charged for, the negative option feature once the free trial ends. Nonetheless, the Commission invites comment on whether additional (or alternative) measures are necessary to prevent unfairness or deception and ensure consumers have adequate notice concerning the initiation of recurring purchases or payments following the completion of a free trial. For example, the Commission seeks comment on whether sellers offering free trials should be required to obtain an additional round of consent before charging a consumer at the completion of the free trial.

***Simple Cancellation Mechanism ("Click to Cancel"):*** Easy cancellation is an essential feature of a fair and non-deceptive negative option program. If consumers cannot easily leave the program when they wish, the negative option feature is little more than a means of charging consumers for goods or services they no longer want. Unfortunately, the record demonstrates easy cancellation is all too often illusory.<sup>77</sup> To address this persistent unfair and deceptive practice, the proposed Rule, consistent with ROSCA and California requirements, directs sellers to provide a simple cancellation

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<sup>76</sup> 15 U.S.C. 57a(a)(1)(B).

<sup>77</sup> See, e.g., NCL and State AGs.

mechanism to immediately halt any recurring charges.<sup>78</sup> However, while ROSCA's cancellation provision is laudable, it has failed to eliminate the barriers many marketers have erected to keep consumers from canceling. Specifically, many marketers take advantage of the ambiguity of the term simply to thwart or delay consumers' attempts to cancel. The Commission's cases, as well as the State AGs' and TINA's comments, demonstrate the need for clearer guardrails in this area. To construct these guardrails, the proposed Rule requires the mechanism to be at least as simple as the one used to initiate the charge or series of charges. Because sellers have huge incentives to create a frictionless purchasing process, ensuring cancellation is equally simple should remove barriers, such as unreasonable hold times or verification requirements. The lack of detailed requirements affords businesses flexibility in meeting the proposed Rule's simple cancellation standard.

The proposal also requires sellers to provide a simple cancellation mechanism through the same medium used to initiate the agreement, whether, for instance, through the Internet, telephone, mail, or in-person. On the Internet, this "Click to Cancel" provision requires sellers, at a minimum, to provide an accessible cancellation mechanism on the same website or web-based application used for sign-up. If the seller allows users to sign up using a phone, it must provide, at a minimum, a telephone number and ensure all calls to that number are answered during normal business hours. Further, to meet the requirement that the mechanism be at least as simple as the one used to initiate the recurring charge, any telephone call used for cancellation cannot be more expensive

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<sup>78</sup> The TSR requires disclosure of the material terms of a seller's cancellation policy (if one exists) and prohibits misrepresentations about cancellation policies. 16 CFR 310.3. However, it does not contain specific cancellation mechanism requirements.

than the call used to enroll (*e.g.*, if the sign-up call is toll free, the cancellation call must also be toll free). For a recurring charge initiated through an in-person transaction, the seller must offer the simple cancellation mechanism through the Internet or by telephone in addition to, where practical, the in-person method used to initiate the transaction.

The proposed Rule provides for this flexible approach in lieu of, as some commenters suggested, prohibitions against a list of specific practices (*e.g.*, additional security requirements, third-party scripting, etc.) that may impair cancellation. Specific prohibitions may be counterproductive, solving today's issues only to inadvertently provide a road map to tomorrow's deception. Unscrupulous sellers, for example, can simply circumvent detailed prohibitions and employ new infinitely clever means to thwart consumers. The proposed performance standard avoids this eventuality. Additionally, such restrictions may prohibit legitimate measures used by sellers for security reasons or other purposes. The proposed provision, therefore, mandates results and provides the flexibility to meet them.

The proposed Rule does not contain a separate provision requiring refunds for consumers "unwittingly enrolled in a negative option plan," as some commenters suggested. Such a provision is not needed to prevent deception because enrolling consumers without their express informed consent would already violate the proposed Rule's consent requirements (proposed Section 425.5).

Finally, the proposed Rule does not adopt a commenter recommendation to augment cancellation provisions by requiring sellers to completely delete consumer data following cancellation to provide consumers with a "true exit." Although such a procedure may be desirable for many consumers, the record does not support an assertion

that the practice of retaining consumer data after cancellation is inherently unfair or deceptive, nor would a requirement related to data deletion prevent other unfair or deceptive practices related to negative options.<sup>79</sup> Instead, this issue involves questions of relief related to broader privacy issues, and thus falls outside the scope of this proceeding.

***Additional Offers Before Cancellation (“Saves”)***: The proposed Rule also contains a provision for sellers who seek to pitch additional offers or modifications (*i.e.*, defined as a “Save” in the proposed Rule) during a consumer’s cancellation attempt. Under the proposal, before making such pitches, the seller must first ask consumers whether they would like to consider such offers or modifications (*e.g.*, “Would you like to consider a different price or plan that could save you money?”). If consumers decline this invitation, the seller must desist from presenting such offers and cancel the negative option arrangement immediately. If they accept, the seller can pitch the alternative offers. To prevent consumers from entering a protracted series of such offers, the proposed Rule also clarifies that a consumer’s consent to receive additional offers or modifications applies only to the cancellation attempt in question and not to subsequent attempts. Thus, consumers could disengage during the “save” attempt (*e.g.*, by hanging up, closing the browser, or disconnecting the chat) and avail themselves of the easy cancellation during a separate, subsequent attempt. As noted in the comments (*e.g.*, NCL and State AGs), evidence demonstrates many businesses have created unnecessary and burdensome obstacles in the cancellation process, including forcing uninterested consumers to listen to multiple upsells before allowing cancellation, that are not outweighed by countervailing benefits to consumers or competition. This is an unfair and deceptive

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<sup>79</sup> 15 U.S.C. 57a(a)(1)(B).

practice. The proposed provision would effectively prohibit such practices by giving consumers the ability to avoid them, while allowing sellers to pitch new offers to those consumers who find these additional offers desirable. In addition, this provision should not create any significant burden for sellers.

***Reminders and Confirmations:*** For contracts involving the automatic delivery of physical goods (*e.g.*, pet food), the proposed Rule does not, as some commenters recommended, mandate confirmatory emails or periodic reminders. In situations where the seller has otherwise clearly disclosed the terms of the deal, obtained consent, and provided a simple cancellation mechanism, the record does not support an assertion that the absence of these reminders is inherently unfair or deceptive, given the requirement that sellers must provide all material information upfront. Moreover, while the lack of a reminder may result in some consumers paying for goods they do not want based simply on the lack of diligence, any injury is reasonably avoidable by consumers themselves. Specifically, each delivery serves as a reminder of the contract, allowing consumers to reasonably avoid further payments by contacting the company and cancelling the arrangement. Thus, the record does not support an assertion that such an agreement is inherently unfair.

Subscriptions and other negative option arrangements that do not involve physical goods, however, present a different issue. As some commenters explained, because these services may have no regular, tangible presence for consumers (*e.g.*, data security monitoring or subscriptions for online services), many consumers may reasonably forget they enrolled in such plans and, as a result, incur perpetual charges for services they do

not want or use. Thus, the failure to provide reminders for such contracts meet all three elements of unfairness.<sup>80</sup>

Accordingly, the Commission proposes to require sellers to provide an annual reminder to consumers enrolled in negative option plans involving anything other than physical goods. Under the proposal, such reminders must identify the product or service, the frequency and amount of charges, and the means to cancel (see proposed Section 425.7). As a matter of good business practice, many sellers already provide such reminders to consumers enrolled in these programs. However, even for those who do not, the proposal should impose little additional burden (*e.g.*, a short, generic email). The Commission seeks comment on this proposal, including, for example, whether the Commission should narrow the coverage of the proposed language by types of covered services or time duration between reminders.

***Material Changes:*** The proposed Rule does not contain a provision addressing the need for notices when sellers make material changes to a negative option contract. Because these contracts can last years, and even decades, the original agreement often allows the seller to change material terms of the agreement such as price, services, and product quantity. As commenters noted, some states have requirements addressing this issue. However, whether such a practice is unfair or deceptive depends heavily on the facts presented in each case (*e.g.*, consumers may reasonably expect a small annual increase in price for some products or services, but not massive increases or even small

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<sup>80</sup> *FTC Policy Statement on Unfairness*, appended to *International Harvester Co.*, 104 F.T.C. 949 (1984). “To justify a finding of unfairness the injury must satisfy three tests. It must be substantial; it must not be outweighed by any countervailing benefits to consumers or competition that the practice produces; and it must be an injury that consumers themselves could not reasonably have avoided.” *Id.*

increases for different products). Because consumer interpretation of these claims is so fact dependent, it is not practical to draw a universal line between legal and violative behavior. Thus, the Commission can best address issues in this area on a case-by-case basis through law enforcement actions. Given the importance of this issue, however, the Commission seeks further comment on whether and how the Rule can address this issue consistent with FTC's authority to combat unfair or deceptive practices.

***Penalties:*** Under the proposal, the civil penalties for the Rule would continue to reflect the amounts set out in 16 CFR 1.98(d).

***State Requirements:*** The Federal Trade Commission Act does not explicitly preempt state law, and the legislative history of the FTC Act indicates that Congress did not intend the FTC to occupy the field of consumer protection regulation.<sup>81</sup> Accordingly, any preemptive effect of a Rule would be limited to instances where it is not possible for a private party to comply with both state and the Commission regulations, or where application of state regulations would frustrate the purposes of the Rule.<sup>82</sup>

Therefore, Section 425.7 of the proposed Rule specifies that the Rule would not supersede, alter, or affect state statutes or regulations relating to negative option marketing, except to the extent that a state statute, regulation, order, or interpretation is inconsistent with the proposed Rule. The proposal also indicates state requirements are not inconsistent with the Rule to the extent they afford greater protection to consumers.

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<sup>81</sup> See, e.g., *Am. Fin. Servs. Ass'n v. FTC*, 767 F.2d 957, 989 (D.C. Cir. 1985).

<sup>82</sup> Preemption would occur where there is an "actual conflict between the two schemes of regulation [such] that both cannot stand in the same area." *Fla. Lime & Avocado Growers, Inc., v. Paul*, 373 U.S. 132, 141 (1963). See also *Am. Fin. Servs.*, 767 F.2d 957 (Credit Practices Rule); *Harry and Bryant Co. v. FTC*, 726 F.2d 993 (4th Cir. 1984) (Funeral Rule); *Am. Optometric Assoc. v. FTC*, 626 F.2d 896 (D.C. Cir. 1980) (Ophthalmic Practices Rule).



The Commission invites comment on whether the proposed Rule conflicts with any existing state requirements.

***Consumer Education:*** The Commission plans to continue its efforts to provide information to help consumers with their purchasing decisions and avoid ensnarement in unwanted recurring payment programs. However, consumer education does not provide a substitute for improving existing regulatory provisions. Consumer education is likely to have a limited benefit where sellers lure consumers into an agreement without consumers' knowledge, particularly with the use of dark patterns.

***Exempted Activities:*** The Commission seeks comment on whether the Rule should exempt any entities or activities that are otherwise subject to the Commission's authority under the FTC Act. In the comments, various interests, such as energy sellers and service contract providers, urged the Commission to exempt their industries. They argued existing state licensing and other requirements that already apply to their activities adequately address the problems noted above and further rules would only interfere with the existing regulatory structure. They note that some state laws (*e.g.*, California) contain exemptions for activities such as service contract sellers and administrators, as well as state public utility commission licensees.

Those commenting on this issue should detail which, if any, industries should be exempt, or not exempt, and why, including whether the proposed Rule would impose requirements that conflict with state regulations targeted to a specific industry sector, or are antithetical to the goals of such state laws.

## **XII. The Rulemaking Process**

As explained in Section XIII of this document, the Commission invites interested parties to submit data, views, and arguments on the proposed amendments to the Negative Option Rule and the issues and questions raised in this document. The comment period will remain open until [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].<sup>83</sup> To the extent practicable, all comments will be available on the public record and posted at the docket for this rulemaking on <https://www.regulations.gov>. The Commission will provide an opportunity for an informal hearing if an interested person requests to present their position orally. *See* 15 U.S.C. 57a(c). Any person interested in making a presentation at an informal hearing must submit a comment requesting to make an oral submission, and the request must identify the person's interests in the proceeding and indicate whether there are any disputed issues of material fact that need to be resolved during the hearing. *See* 16 CFR 1.11(e). The comment should also include a statement explaining why an informal hearing is warranted and a summary of any anticipated testimony. If the Commission schedules an informal hearing, either on its own initiative or in response to request by an interested party, a separate notice will issue. *See id.* 1.12(a).

The Commission can decide to finalize the proposed rule if the rulemaking record, including the public comments in response to this NPRM, supports such a conclusion. The Commission may, either on its own initiative or in response to a commenter's request, engage in additional processes, which are described in 16 CFR

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<sup>83</sup> The Commission elects not to provide a separate, second comment period for rebuttal comments. *See* 16 CFR 1.11(e) ("The Commission may in its discretion provide for a separate rebuttal period following the comment period.").

1.12, 1.13. Based on the comment record and existing prohibitions against deceptive or unfair negative option marketing under Section 5 of the FTC Act and other rules and statutes, the Commission does not here identify any disputed issues of material fact that need to be resolved at an informal hearing. The Commission may still do so later, on its own initiative or in response to a persuasive showing from a commenter.

### **XIII. Request for Comments**

The Commission seeks comments on all aspects of the proposed requirements, including the likely effectiveness of the proposed Rule in helping the Commission combat unfair or deceptive practices in negative option marketing. The Commission also seeks comment on various alternatives to the proposed regulation, to further address disclosures, consumer consent, and cancellation. It also seeks comment on other approaches, such as the publication of additional consumer and business education. The Commission seeks any suggestions or alternative methods for improving current requirements. In their replies, commenters should provide any available evidence and data that supports their position, such as empirical data, consumer perception studies, and consumer complaints.

You can file a comment online or on paper. For the Commission to consider your comment, we must receive it on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. Write “Negative Option Rule; Project No. P064202” on your comment. Your comment—including your name and your state—will be placed on the public record of this proceeding, including, to the extent practicable, on the website <https://www.regulations.gov>.

Because of the agency's heightened security screening, postal mail addressed to the Commission will be subject to delay. We strongly encourage you to submit your comments online through the <https://www.regulations.gov> website. To ensure that the Commission considers your online comment, please follow the instructions on the web-based form.

If you file your comment on paper, write "Negative Option Rule; Project No. P064202" on your comment and on the envelope, and mail your comment to the following address: Federal Trade Commission, Office of the Secretary, 600 Pennsylvania Avenue NW, Suite CC-5610 (Annex N), Washington, DC 20580. If possible, please submit your paper comment to the Commission by overnight service.

Because your comment will be placed on the public record, you are solely responsible for making sure that your comment does not include any sensitive or confidential information. In particular, your comment should not contain sensitive personal information, such as your or anyone else's Social Security number; date of birth; driver's license number or other state identification number or foreign country equivalent; passport number; financial account number; or credit or debit card number. You are also solely responsible for making sure your comment does not include any sensitive health information, such as medical records or other individually identifiable health information. In addition, your comment should not include any "[t]rade secret or any commercial or financial information which . . . is privileged or confidential"—as provided in Section 6(f) of the FTC Act, 15 U.S.C. 46(f), and FTC Rule 4.10(a)(2), 16 CFR 4.10(a)(2)—including, in particular, competitively sensitive information such as

costs, sales statistics, inventories, formulas, patterns, devices, manufacturing processes, or customer names.

Comments containing material for which confidential treatment is requested must be filed in paper form, must be clearly labeled “Confidential,” and must comply with FTC Rule 4.9(c), 16 CFR 4.9(c). In particular, the written request for confidential treatment that accompanies the comment must include the factual and legal basis for the request and must identify the specific portions of the comment to be withheld from the public record. *See* FTC Rule 4.9(c). Your comment will be kept confidential only if the General Counsel grants your request in accordance with the law and the public interest. Once your comment has been posted publicly at <https://www.regulations.gov>—as legally required by FTC Rule 4.9(b), 16 CFR 4.9(b)—we cannot redact or remove your comment, unless you submit a confidentiality request that meets the requirements for such treatment under FTC Rule 4.9(c), and the General Counsel grants that request.

Visit the FTC website to read this document and the news release describing it. The FTC Act and other laws that the Commission administers permit the collection of public comments to consider and use in this proceeding as appropriate. The Commission will consider all timely and responsive public comments it receives on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. For information on the Commission’s privacy policy, including routine uses permitted by the Privacy Act, see <https://www.ftc.gov/policy-notice/privacy-policy>.

#### **XIV. Preliminary Regulatory Analysis and Regulatory Flexibility Act**

##### **Requirements**

Under Section 22(a) of the FTC Act, 15 U.S.C. 57b-3(a), the Commission must issue a preliminary regulatory analysis for a proceeding to amend a rule if the Commission: (1) estimates that the amendment will have an annual effect on the national economy of \$100 million or more; (2) estimates that the amendment will cause a substantial change in the cost or price of certain categories of goods or services; or (3) otherwise determines that the amendment will have a significant effect upon covered entities or upon consumers. The Commission has preliminarily determined that the proposed amendments to the Rule will not have such effects on the national economy; on the cost of goods and services offered for sale by mail, telephone, or over the Internet; or on covered parties or consumers. The proposed amendments contain requirements related to consumer disclosures, consumer consent, and cancellation. In developing these proposals, the Commission has sought to minimize prescriptive requirements and provide flexibility to sellers in meeting the Rule's objectives. In addition, most sellers provide some sort of disclosures, follow consent procedures, and offer cancellation mechanisms in the normal course of business. Thus, compliance with the proposed requirements should not create any substantial added burden. The Commission, however, requests comment on the economic effects of the proposed amendments.

The Regulatory Flexibility Act ("RFA"), 5 U.S.C. 601-612, requires that the Commission conduct an Initial Regulatory Flexibility Analysis ("IRFA") with a proposed rule and a Final Regulatory Flexibility Analysis ("FRFA"), if any, with the final rule, unless the Commission certifies that the rule will not have a significant economic impact on a substantial number of small entities. *See* 5 U.S.C. 603-605. The RFA requires an agency to provide an IRFA with the proposed Rule and a FRFA with the final rule, if

any. The Commission is not required to make such analyses if a rule would not have such an economic effect, or if the rule is exempt from notice-and-comment requirements.

The Commission does not have sufficient empirical data at this time regarding the affected industries to determine whether the proposed amendments to the Rule may affect a substantial number of small entities as defined in the RFA. However, a preliminary analysis suggests the proposed amendments to the Rule would not have a significant economic impact on small entities. The proposed amended rule would apply to all businesses using Negative Option Features in the course of selling goods or services. Small entities in potentially any industry could incorporate a negative option feature into a sales transaction. The Commission is unaware, however, of any source of data identifying across every industry the number of small entities that routinely utilize negative option features. Based on the comments received in response to the ANPR, and on the Commission's own experience and expertise, the Commission believes the use of negative option features may be more prevalent in some industries than others, for example, computer security services, online streaming services, and service contract providers. The Commission lacks sufficient data to determine the portion of total estimated affected companies (see estimate in the Paperwork Reduction Act analysis in section XV) that qualify as small businesses across each industry. Therefore, the Commission seeks comments on the percentage of affected companies that qualify as small businesses.

In addition, it is also unclear whether the proposed amendments to the Rule would have a significant economic impact on small entities. However, as noted in Section XV, the impact of the proposed requirements on all firms, whether small businesses or not,

may not be substantial. As discussed in that section, the FTC estimates the majority of firms subject to the proposed recordkeeping requirements already retain these types of records in the normal course of business. The FTC anticipates many transactions subject to the Rule are conducted via the Internet, minimizing burdens associated with compliance. Additionally, most entities subject to the Rule are likely to store data through automated means, which reduces compliance burdens associated with record retention. Furthermore, regarding the proposed disclosure requirements, it is likely the substantial majority of sellers routinely provide these disclosures in the ordinary course as a matter of good business practice. Moreover, many state laws already require the same or similar disclosures as the Rule would mandate. Finally, some negative option sellers are already covered by the Telemarketing Sales Rule and thus subject to its disclosure requirements. The Commission therefore anticipates that the Rule will not have a significant economic impact on small entities. Nevertheless, because the precise costs to small entities of updating their systems and disclosures are difficult to predict, the Commission has decided to publish the following IRFA pursuant to the RFA and to request public comment on the impact on small businesses of the proposed amendments.

**A. Description of the Reasons Why Action by the Agency Is Being Considered**

As described in this document, the proposed amendments address unfair or deceptive practices in negative option marketing. The FTC, other federal agencies, and state attorneys general have brought multiple actions to stop and remedy the harms caused by negative option marketing. The record demonstrates, however, that existing authorities fall short because there is no uniform legal framework, which leaves entire



sectors of the economy under-regulated and constrain the relief that the Commission may obtain for law violations. In the ANPR, the Commission explained it receives thousands of complaints a year related to negative option marketing. As discussed above in Sections VI, VII, and IX, the proposed changes, which replace existing provisions in the Rule, enhance and clarify existing requirements currently dispersed in other rules and statutes. They also consolidate all requirements, such as those in the TSR, specifically applicable to negative option marketing. Further, the proposed Rule would allow the Commission to seek civil penalties and consumer redress in contexts where such remedies are currently unavailable, such as deceptive or unfair practices involving negative options in traditional print materials and face-to-face transactions (*i.e.*, in media not covered by ROSCA or the TSR) and misrepresentations (which are not expressly covered by ROSCA, even when on the Internet).

**B. Succinct Statement of the Objectives of, and Legal Basis for, the Proposed Amendments**

The objective of the proposed amendments is to curb deceptive or unfair practices occurring in negative option marketing. The legal basis for the proposed amendments is Section 18(b)(3) of the FTC Act, 15 U.S.C. 57a(b)(3), which provides the Commission with authority to issue a notice of proposed rulemaking where it has reason to believe that the unfair or deceptive acts or practices which are the subject of the proposed rulemaking are prevalent.

**C. Description and Estimate of the Number of Small Entities to Which the Proposed Amendments Will Apply**

The proposed amendments affect sellers, regardless of industry, engaged in making negative option offers, defined by the Rule to mean any person “selling, offering, promoting, charging for, or otherwise marketing goods or services with a Negative Option Feature.” As discussed in the introduction to this section, determining a precise estimate of how many of these are small entities, or describing those entities further, is not readily feasible because the staff is not aware of published, comprehensive revenue and/or employment data for all possible affected entities, which come from a variety of different industries and which may or may not sell goods or services with negative options. The Commission invites comment and information on this issue.

**D. Description of the Projected Reporting, Recordkeeping and Other Compliance Requirements**

The proposed rule amendments would require negative option sellers to disclose certain information about negative option features, obtain a consumer’s express informed consent and maintain records of consumer consent for three years after the initial transaction or one year after cancellation (whichever is longer), and provide consumers a simple mechanism for cancellation. The estimates for the proposed recordkeeping and disclosure requirements are set out within the Paperwork Reduction Act analysis in Section XV. As mentioned in the earlier introductory section of the IFRA, the impact of these proposed requirements on small entities is most likely not significant. The small entities potentially covered by these amendments will include all such entities subject to the Rule (*e.g.*, for purposes of the proposed amendment, entities selling goods or services through negative option offerings). The professional skills necessary for compliance with

the proposed amendments would include sales and clerical personnel. The Commission invites comment on these issues.

#### **E. Duplicative, Overlapping, or Conflicting Federal Rules**

As discussed in this document, the proposed amendments contain certain provisions that are similar to or expand on requirements in the TSR as well as ROSCA. The proposed amendments would establish a common set of requirements applicable to all types of negative option marketing. The Commission anticipates these changes will facilitate compliance and reduce potential confusion among sellers and consumers regarding their compliance obligations for sales involving negative option offers. The FTC has not identified any other federal statutes, rules, or policies currently in effect that may duplicate or conflict with the proposed rule. As explained above, the proposed amendments have been specifically drafted to avoid any conflict with EFTA and Regulation E. The proposed amendments are also consistent with the existing requirements of the TSR, *see supra* Section XI, while filling a regulatory gap by extending protections to other, non-telemarketing transactions. The Commission invites comment and information regarding any potentially duplicative, overlapping, or conflicting federal statutes, rules, or policies.

#### **F. Description of Any Significant Alternatives to the Proposed Amendments**

In formulating the proposed amendments, the Commission has made every effort to avoid imposing unduly burdensome requirements on sellers. To that end, the Commission has avoided, where possible, proposing specific, prescriptive requirements that could stifle marketing innovation or otherwise limit seller options in using new

technologies. In addition, the Commission has sought comments as detailed in Section XI of this document on several alternatives, including provisions related to consent requirements (additional consent for free trials) and reminder requirements (narrowing the scope of product types requiring reminders). The former would likely increase burdens on sellers but, at the same time, may benefit consumers by helping to ensure they do not become enrolled in negative option arrangements they do not want. The latter alternative would likely decrease burden but may fail to help consumers cancel programs they are unaware of. The Commission seeks comments on the ways in which the proposed amendments could be modified to reduce costs or burdens for small entities. If the comments filed in response to this document identify small entities that would be affected by the proposed Rule, as well as alternative methods of compliance that would reduce the economic impact of the proposed Rule on such entities, the Commission will consider the feasibility of such alternatives and determine whether they should be incorporated into the final Rule.

#### **XV. Paperwork Reduction Act**

The current Rule contains various provisions that constitute information collection requirements as defined by 5 CFR 1320.3(c), the definitional provision within the Office of Management and Budget (“OMB”) regulations implementing the Paperwork Reduction Act (“PRA”). OMB has approved the Rule’s existing information collection requirements through January 31, 2024 (OMB Control No. 3084-0104). The proposed amendments make changes in the Rule’s recordkeeping and disclosure requirements that will increase the PRA burden as detailed below. Accordingly, FTC

staff will submit this notice of proposed rulemaking and associated Supporting Statement to OMB for review under the PRA.<sup>84</sup>

### **Estimated Annual Hours Burden: 265,000 hours**

The estimated burden for recordkeeping compliance is 53,000 hours and the estimated burden for the requisite disclosures is 212,000 hours. Thus, the total PRA burden is 265,000 hours. These estimates are explained below.

### **Number of Respondents**

FTC staff estimates there are 106,000 entities currently offering negative option features to consumers. This estimate is based primarily on data from the U.S. Census North American Industry Classification System (NAICS) for firms and establishments in industry categories wherein some sellers offer free trials, automatic renewal, prenotification plans, and continuity plans. Based on NAICS information as well as its own research and industry knowledge, FTC staff identified an estimated total of 530,000 firms involved in such industries.<sup>85</sup> However, FTC staff estimates that only a fraction of the total firms in these industry categories offer negative option features to consumers. For example, few grocery stores and clothing retailers, which account for approximately a third of the of the total estimate from all industry categories, are likely to regularly offer

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<sup>84</sup> The PRA analysis for this rulemaking focuses strictly on the information collection requirements created by and/or otherwise affected by the amendments.

<sup>85</sup> Examples of these industries include sellers of software, streaming media, social media services, financial monitoring, computer security, fitness services, groceries and meal kits, dietary supplements, sporting goods, home service contracts, home security systems, office supplies, pet food, computer supplies, cleaning supplies, home/lawn maintenance services, personal care products, clothing sales, energy providers, newspapers, magazines, and books. The NAICS does not provide estimates for all of these categories. Where such data is unavailable, the staff has used its own estimates based on its knowledge of these industry categories.

negative option features. In addition, some entities included in the total may qualify as common carriers, exempt from the Commission's authority under the FTC Act.

Accordingly, the Commission estimates that approximately 106,000 business entities (20%) offer negative option features to consumers.

### **Recordkeeping Hours**

The proposed Rule would require negative option sellers to retain records sufficient to verify consumer consent related to a negative option feature and consideration of further offers prior to cancellation for at least 3 years, or until one year after the consumer cancels the contract or the contract is otherwise terminated, whichever period is longer. FTC staff estimates the majority of firms subject to the Rule already retain these types of records in the normal course of business. Under such conditions, the time and financial resources needed to comply with disclosure requirements do not constitute "burden" under the PRA.<sup>86</sup> Moreover, staff anticipates that many transactions subject to the Rule are conducted via the Internet and most entities subject to the Rule are likely to store data through automated means, which reduces compliance burdens associated with record retention. Accordingly, staff estimates that 53,000 entities subject

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<sup>86</sup> Under the PRA, the time, effort, and financial resources necessary to comply with a collection of information that would be incurred by persons in the normal course of their activities (*e.g.*, in compiling and maintaining business records) does not constitute burden from the Rule where the associated recordkeeping is a usual and customary part of business activities. 5 CFR 1320.3(b)(2).

to the Rule will require approximately one hour per year to comply with the Rule's recordkeeping requirements, for an annual total of 53,000 burden hours.

### **Disclosure Hours**

The proposed Rule would require negative option sellers to provide several disclosures to consumers including the amount to be charged, the deadline the consumer must act to avoid charges, the date charges will be submitted for payment, the cancellation mechanism the consumer can use to end the agreement, reminders for recurring payments involving non-physical goods, and requests related to further offers prior to cancellation.<sup>87</sup> Staff anticipates that the substantial majority of sellers routinely provide these disclosures in the ordinary course as a matter of good business practice. For these sellers, the time and financial resources associated with making these disclosures do not constitute a "burden" under the PRA because they are a usual and customary part of regular business practice. 5 CFR 1320.3(b)(2). Moreover, many state laws require the same or similar disclosures as the Rule mandates. In addition, approximately 2,000 negative option sellers are already covered by the Telemarketing Sales Rule and subject to its disclosure requirements. Accordingly, to reflect these various considerations, FTC estimates the disclosure burden required by the Rule will be, on average, two hours each

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<sup>87</sup> Because all legitimate sellers offer consumers some sort of cancellation mechanism in the normal course of business, the proposed Rule's requirement for a simple cancellation mechanism is unlikely to create additional burdens.

year for each seller subject estimated to be subject the Rule, for a total estimated annual burden of 212,000 hours.

**Estimated Annual Labor Cost: \$5,689,550**

As indicated above, staff estimates existing covered entities will require approximately 53,000 hours to comply with the proposed rule's recordkeeping provisions. Applying a clerical wage rate of \$18.75/hour,<sup>88</sup> recordkeeping maintenance for existing telemarketing entities would amount to an annual cost of approximately \$993,750.

The estimated annual labor cost for disclosures for all entities is \$4,695,800. This total is the product of applying an estimated hourly wage rate for sales personnel of \$22.15<sup>89</sup> to the estimate of 212,000 hours for compliance with the Rule's disclosure requirements.

Thus, the estimated annual labor costs are \$5,689,550 [(\$993,750 recordkeeping) + (\$4,695,800 disclosure)].

**Estimated Annual Non-Labor Cost**

The capital and start-up costs associated with the Rule's recordkeeping provisions are *de minimis*. Any disclosure or recordkeeping capital costs involved with the Rule,

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<sup>88</sup> This figure is derived from the mean hourly wage shown for Information and Record Clerks. See *Occupational Employment and Wages—May 2021*, Bureau of Labor Statistics, U.S. Department of Labor (March 31, 2022), Table 1 (“National employment and wage data from the Occupational Employment Statistics survey by occupation, May 2021”), available at <https://www.bls.gov/news.release/pdf/ocwage.pdf>.

<sup>89</sup> This figure is derived from the mean hourly wage shown for Sales and related occupations. See *Occupational Employment and Wages*, *supra*.



such as equipment and office supplies, would be costs borne by sellers in the normal course of business.

Pursuant to Section 3506(c)(2)(A) of the PRA, the FTC invites comments on: (1) whether the disclosure, recordkeeping, and reporting requirements are necessary, including whether the resulting information will be practically useful; (2) the accuracy of our burden estimates, including whether the methodology and assumptions used are valid; (3) how to improve the quality, utility, and clarity of the disclosure requirements; and (4) how to minimize the burden of providing the required information to consumers.

#### **XVI. Communications by Outside Parties to the Commissioners or Their Advisors**

Pursuant to Commission Rule 1.18(c)(1), the Commission has determined that communications with respect to the merits of this proceeding from any outside party to any Commissioner or Commissioner advisor shall be subject to the following treatment. Written communications and summaries or transcripts of oral communications shall be placed on the rulemaking record if the communication is received before the end of the comment period. They shall be placed on the public record if the communication is received later. Unless the outside party making an oral communication is a member of Congress, such communications are permitted only if advance notice is published in the Weekly Calendar and Notice of “Sunshine” Meetings.<sup>90</sup>

#### **XVII. Proposed Rule Language**

##### **List of Subjects in 16 CFR Part 425**

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<sup>90</sup> See 15 U.S.C. 57a(i)(2)(A); 16 CFR 1.18(c).

Advertising, Trade Practices.

For the reasons set out in this document, the Commission proposes to amend part 425 of title 16 of the Code of Federal Regulations as follows:

1. Revise part 425 to read as follows:

**PART 425—RULE CONCERNING RECURRING SUBSCRIPTIONS AND  
OTHER NEGATIVE OPTION PLANS**

Sec.

425.1 Scope.

425.2 Definitions.

425.3 Misrepresentations.

425.4 Important Information.

425.5 Consent.

425.6 Simple Cancellation (“Click to Cancel”).

425.7 Annual Reminders for Negative Option Features Not Involving Physical Goods.

425.8 Relation to State Laws.

Authority: 15 U.S.C. 41-58.

**425.1 Scope.**

This Rule contains requirements related to any form of negative option plan in any media, including, but not limited to, the Internet, telephone, in-print, and in-person transactions.

**425.2 Definitions.**

(a) *Billing Information* means any data that enables any person to access a customer's account, such as a credit card, checking, savings, share or similar account, utility bill, mortgage loan account, or debit card.

(b) *Charge, Charged, or Charging* means any attempt to collect money or other consideration from a consumer, including but not limited to causing Billing Information to be submitted for payment, including against the consumer's credit card, debit card, bank account, telephone bill, or other account.

(c) *Clear and Conspicuous* means that a required disclosure is easily noticeable (*i.e.* difficult to miss) and easily understandable by ordinary consumers, including in all of the following ways:

(1) In any communication that is solely visual or solely audible, the disclosure must be made through the same means through which the communication is presented. In any communication made through both visual and audible means, such as a television advertisement, the disclosure must be presented simultaneously in both the visual and audible portions of the communication even if the representation requiring the disclosure is made in only one means.

(2) A visual disclosure, by its size, contrast, location, the length of time it appears, and other characteristics, must stand out from any accompanying text or other visual elements so that it is easily noticed, read, and understood.

(3) An audible disclosure, including by telephone or streaming video, must be delivered in a volume, speed, and cadence sufficient for ordinary consumers to easily hear and understand it.

(4) In any communication using an interactive electronic medium, such as the Internet, phone app, or software, the disclosure must be unavoidable. A disclosure is not Clear and Conspicuous if a consumer must take any action, such as clicking on a hyperlink or hovering over an icon, to see it.

(5) The disclosure must use diction and syntax understandable to ordinary consumers and must appear in each language in which the representation that requires the disclosure appears.

(6) The disclosure must comply with these requirements in each medium through which it is received, including all electronic devices and face-to-face communications.

(7) The disclosure must not be contradicted or mitigated by, or inconsistent with, anything else in the communication.

(8) When the representation or sales practice targets a specific audience, such as children, the elderly, or the terminally ill, “ordinary consumers” includes members of that group.

(d) *Negative Option Feature* is a provision of a contract under which the consumer’s silence or failure to take affirmative action to reject a good or service or to cancel the agreement is interpreted by the negative option seller as acceptance or continuing acceptance of the offer, including, but not limited to:

(1) an automatic renewal;

(2) a continuity plan;

(3) a free-to-pay conversion or fee-to-pay conversion; or

(4) a pre-notification negative option plan.

(e) *Negative Option Seller* means the person selling, offering, promoting, charging for, or otherwise marketing goods or services with a Negative Option Feature.

(f) *Save* means an attempt by a seller to present any additional offers, modifications to the existing agreement, reasons to retain the existing offer, or similar information when a consumer attempts to cancel a Negative Option Feature.

#### **425.3 Misrepresentations.**

In connection with promoting or offering for sale any good or service with a Negative Option Feature, it is a violation of this Rule and an unfair or deceptive act or practice in violation of Section 5 of the Federal Trade Commission Act (“FTC Act”) for any Negative Option Seller to misrepresent, expressly or by implication, any material fact related to the transaction, such as the Negative Option Feature, or any material fact related to the underlying good or service.

#### **425.4 Important Information.**

(a) *Disclosures.* In connection with promoting or offering for sale any good or service with a Negative Option Feature, it is a violation of this Rule and an unfair or deceptive act or practice in violation of Section 5 of the FTC Act for a Negative Option Seller to fail to disclose to a consumer, prior to obtaining the consumer’s Billing Information, any material term related to the underlying good or service that is necessary to prevent deception, regardless of whether that term directly relates to the Negative Option Feature, and including but not limited to:

(1) That consumers will be Charged for the good or service, or that those Charges will increase after any applicable trial period ends, and, if applicable, that the Charges will be on a recurring basis, unless the consumer timely takes steps to prevent or stop such Charges;

(2) The deadline (by date or frequency) by which the consumer must act in order to stop all Charges;

(3) The amount (or range of costs) the consumer will be Charged and, if applicable, the frequency of such Charges a consumer will incur unless the consumer takes timely steps to prevent or stop those Charges;

(4) The date (or dates) each Charge will be submitted for payment; and

(5) The information necessary for the consumer to cancel the Negative Option Feature.

*(b) Form and Content of Required Information.*

(1) Clear and Conspicuous: Each disclosure required by paragraph (a) of this section must be Clear and Conspicuous.

(2) Placement:

(i) If directly related to the Negative Option Feature, the disclosures must appear immediately adjacent to the means of recording the consumer's consent for the Negative Option Feature; or

(ii) If not directly related to the Negative Option Feature, the disclosures must appear before consumers make a decision to buy (*e.g.*, before they "add to shopping cart").

(3) Other Information: All communications, regardless of media, must not contain any other information that interferes with, detracts from, contradicts, or otherwise undermines the ability of consumers to read, hear, see, or otherwise understand the disclosures, including any information not directly related to the material terms and conditions of any Negative Option Feature.

#### **425.5 Consent.**

(a) *Express Informed Consent.* In connection with promoting or offering for sale any good or service with a Negative Option Feature, it is a violation of this Rule and an unfair or deceptive act or practice in violation of Section 5 of the FTC Act for a Negative Option Seller to fail to obtain the consumer's express informed consent before Charging the consumer. In obtaining such expressed informed consent, the Negative Option Seller must:

- (1) Obtain the consumer's unambiguously affirmative consent to the Negative Option Feature offer separately from any other portion of the transaction;
- (2) Not include any information that interferes with, detracts from, contradicts, or otherwise undermines the ability of consumers to provide their express informed consent to the Negative Option Feature;
- (3) Obtain the consumer's unambiguously affirmative consent to the rest of the transaction; and
- (4) Keep or maintain verification of the consumer's consent for at least three years, or one year after the contract is otherwise terminated, whichever period is longer.

(b) *Requirements for Negative Option Features Covered in the Telemarketing Sales Rule.* Negative Option Sellers covered by the Telemarketing Sales Rule must comply with all applicable requirements provided in part 310 of this title, including, for transactions involving preacquired account information and a free-pay-conversion, obtaining from the customer, at a minimum, the last four (4) digits of the account number to be charged and making and maintaining an audio recording of the entire telemarketing transaction as required by part 310. (c) *Documentation of Unambiguously Affirmative Consent for Written Offers.* Except for transactions covered by the preauthorized transfer provisions

of the Electronic Fund Transfer Act (15 U.S.C. 1693e) and Regulation E (12 CFR 1005.10), a Negative Option Seller will be deemed in compliance with the requirements of paragraph (a)(3) of this section for all written offers (including over the Internet or phone applications), if that seller obtains the required consent through a check box, signature, or other substantially similar method, which the consumer must affirmatively select or sign to accept the Negative Option Feature and no other portion of the transaction. The consent request must be presented in a manner and format that is clear, unambiguous, non-deceptive, and free of any information not directly related to the consumer's acceptance of the Negative Option Feature.

#### **425.6 Simple Cancellation (“Click to Cancel”).**

(a) *Simple Mechanism Required for Cancellation.* In connection with promoting or offering for sale any good or service with a Negative Option Feature, it is a violation of this Rule and an unfair or deceptive act or practice in violation of Section 5 of the FTC Act for the Negative Option Seller to fail to provide a simple mechanism for a consumer to cancel the Negative Option Feature and avoid being Charged for the good or service and immediately stop any recurring Charges.

(b) *Simple Mechanism at Least as Simple as Initiation.* The simple mechanism required by paragraph (a) of this section must be at least as easy to use as the method the consumer used to initiate the Negative Option Feature.

(c) *Minimum Requirements for Simple Mechanism.* At a minimum, the Negative Option Seller must provide the simple mechanism required by paragraph (a) of this section through the same medium (such as Internet, telephone, mail, or in-person) the consumer used to consent to the Negative Option Feature, and:



(1) For Internet cancellation, in addition to the requirements of paragraphs (a) and (b) of this section, the Negative Option Seller must provide, at a minimum, the simple mechanism over the same website or web-based application the consumer used to purchase the Negative Option Feature.

(2) For telephone cancellation, in addition to the requirements of paragraphs (a) and (b) of this section, the Negative Option Seller must, at a minimum, provide a telephone number, and assure that all calls to this number are answered promptly during normal business hours and are not more costly than the telephone call the consumer used to consent to the Negative Option Feature.

(3) For in-person sales, in addition to the requirements of paragraphs (a) and (b) of this section, the Negative Option Seller must offer the simple mechanism through the Internet or by telephone in addition to, where practical, an in-person method similar to that the consumer used to consent to the Negative Option Feature. If the simple mechanism is offered through the telephone, all calls must be answered during normal business hours and, if applicable, must not be more costly than the telephone call the consumer used to consent to the Negative Option Feature.

(d) *Saves*: The seller must immediately cancel the Negative Option Feature upon request from a consumer, unless the seller obtains the consumer's unambiguously affirmative consent to receive a Save prior to cancellation. Such consent must apply only to the cancellation attempt in question and not to subsequent attempts. The Negative Option Seller must keep or maintain verification of the consumer's consent to receiving a Save prior to cancellation for at least three years, or one year after the contract is otherwise terminated, whichever period is longer.

**§ 425.7 Annual Reminders for Negative Option Features Not Involving Physical Goods.**

In connection with sales with a Negative Option Feature that do not involve the automatic delivery of physical goods, it is a violation of this Rule and an unfair act or practice in violation of Section 5 of the FTC Act for a Negative Option Seller to fail to provide consumers reminders, at least annually, identifying the product or service, the frequency and amount of charges, and the means to cancel. At a minimum, such reminders must be provided through the same medium (such as Internet, telephone, or mail) the consumer used to consent to the Negative Option Feature. For in-person sales, the Negative Option Seller must provide the reminder through the Internet or by telephone in addition to, where practical, an in-person method similar to that the consumer used to consent to the Negative Option Feature.

**§ 425.8 Relation to State Laws.**

(a) *In General.* This part shall not be construed as superseding, altering, or affecting any other State statute, regulation, order, or interpretation relating to negative option requirements, except to the extent that such statute, regulation, order, or interpretation is inconsistent with the provisions of this part, and then only to the extent of the inconsistency.

(b) *Greater Protection under State Law.* For purposes of this section, a State statute, regulation, order, or interpretation is not inconsistent with the provisions of this part if the protection such statute, regulation, order, or interpretation affords any consumer is greater than the protection provided under this part.

By direction of the Commission, Commissioner Wilson dissenting.

**April J. Tabor,**

*Secretary.*

# EXHIBIT 9



## Heuristic Evaluations and Expert Reviews

In a heuristic evaluation, usability experts review your site's interface and compare it against accepted usability principles. The analysis results in a list of potential usability issues.

### Advantages and Disadvantages of Heuristics

A heuristic evaluation should not replace usability testing. Although the heuristics relate to criteria that affect your site's usability, the issues identified in a heuristic evaluation are different than those found in a usability test.

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• It can provide some quick and relatively inexpensive feedback to designers.</li><li>• You can obtain feedback early in the design process.</li><li>• Assigning the correct heuristic can help suggest the best corrective measures to designers.</li><li>• You can use it together with other usability testing methodologies.</li><li>• You can conduct <a href="#">usability testing</a> to further examine potential issues.</li></ul>	<ul style="list-style-type: none"><li>• It requires knowledge and experience to apply the heuristics effectively.</li><li>• Trained usability experts are sometimes hard to find and can be expensive.</li><li>• You should use multiple experts and aggregate their results.</li><li>• The evaluation may identify more minor issues and fewer major issues.</li></ul>

### Nielsen's Heuristics

Though many groups have developed heuristics, one of the best-known sources is the set developed by Nielsen's in 1994. Nielsen refined the list originally developed in 1990 by himself and Rolf Molich. Nielsen's Heuristics include:

- **Visibility of system status:** The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.
- **Match between system and the real world:** The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.
- **User control and freedom:** Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.
- **Consistency and standards:** Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

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- **Error prevention:** Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.
  - **Recognition rather than recall:** Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.
  - **Flexibility and efficiency of use:** Accelerators—unseen by the novice user—may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.
  - **Aesthetic and minimalist design:** Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.
  - **Help users recognize, diagnose, and recover from errors:** Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.
  - **Help and documentation:** Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

## Expert Reviews

In an expert review, the reviewers already know and understand the heuristics. Because of this, reviewers do not use a specific set of heuristics. As a result, the expert review tends to be less formal, and they are not required to assign a specific heuristic to each potential problem.

## References

Molich, R. and Nielsen, J., Improving a human- computer dialogue, Communications of the ACM, 33(3), 338-348, (1990).

Nielsen, J., Enhancing the explanatory power of usability heuristics, CHI'94 Conference Proceedings, (1994).

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# EXHIBIT 10

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF TEXAS  
DALLAS DIVISION

FEDERAL TRADE COMMISSION, : Civil Action  
Plaintiff, : Case No. 3:19-cv-02281-K  
vs. :  
MATCH GROUP, INC., a corporation, :  
MATCH GROUP, LLC, formerly  
MATCH.COM, LLC, a Limited :  
Liability Company,  
:  
Defendant.

Deposition of BIKRAM BANDY, taken on behalf of  
Defendant, by Chad Hummel, of Sidley Austin, LLP, at 1501 K  
Street, NW, Washington, D.C., commencing at 10:09 a.m., on  
October 24, 2022, before Linda C. Marshall, RPR.

APPEARANCES:

FOR THE PLAINTIFF: M. HASAN AIJAZ, Esquire  
Federal Trade Commission

FOR THE DEFENDANT: CHAD HUMMEL, Esquire  
Sidley Austin, LLP

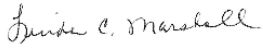


<p>1 Q My question was, how was the 64,000 derived?</p> <p>2 MR. AIJAZ: Again, objection, relevancy to the</p> <p>3 superceding response if it has been superceded.</p> <p>4 THE WITNESS: Okay. I didn't delve too deeply into</p> <p>5 this, but it is my understanding that this is based on the 8.7</p> <p>6 million that we talked about in the initial disclosure, because</p> <p>7 if you multiply 64,000 times 136, it's 8.7 million. And it was</p> <p>8 based on data that calculated the average subscription cost. It</p> <p>9 divided the -- so, it split the 8.7 million into 5 million and</p> <p>10 3.7 million, 5 million being the un-refunded amounts from</p> <p>11 consumers who complained that they thought they had canceled and</p> <p>12 the 3.7 million was the time spent dealing with refunds.</p> <p>13 So, it takes the 5 million, divides that by the average</p> <p>14 subscription cost amount, which was, like, I want to say, \$78 or</p> <p>15 something that they derive from Match data. That gives you</p> <p>16 about 64,000 consumers. And then they took the</p> <p>17 64,000 consumers, divided the 3.7 million by that and that ends</p> <p>18 up being 50 some dollars. And you add the 78 to the 50 sum and</p> <p>19 that gives you the 136. So, in some sense it was -- those</p> <p>20 figures were reverse-engineered from the \$8.7 million figure we</p> <p>21 talked about earlier from the initial disclosure.</p> <p>22 BY MR. HUMMEL:</p> <p>23 Q The 64,000 harmed consumers and the \$136 of average harm</p> <p>24 per consumer were reverse-engineered from the 8.7 million?</p> <p>25 A That came from the original analysis I spoke about earlier</p> <p style="text-align: right;">Page 90</p>	<p>1 cancel but was unable to do so.</p> <p>2 Q Even though the flow didn't change?</p> <p>3 A The flow did change.</p> <p>4 Q Okay. So, every iteration of the flow would be a separate</p> <p>5 violation or every consumer that tried to cancel and couldn't?</p> <p>6 MR. AIJAZ: Objection, form.</p> <p>7 THE WITNESS: The latter.</p> <p>8 BY MR. HUMMEL:</p> <p>9 Q The latter. Is there any precedent for that, that you're</p> <p>10 aware of, that a court has imposed a judgment for every consumer</p> <p>11 who tried to cancel and couldn't using the same flow?</p> <p>12 MR. AIJAZ: Objection, outside the scope.</p> <p>13 THE WITNESS: It didn't come up in my preparation. I</p> <p>14 don't know one way or the other.</p> <p>15 BY MR. HUMMEL:</p> <p>16 Q All right. In your personal experience, ten years at the</p> <p>17 FTC, has there ever been a litigating decision where it's every</p> <p>18 consumer who tried to access a particular flow?</p> <p>19 A I don't know whether we have litigated decisions on that</p> <p>20 particular point, but I do know that that is a position we have</p> <p>21 taken and in settlements.</p> <p>22 Q I know that.</p> <p>23 Okay. Why don't we take our lunch break? Let's go -- how</p> <p>24 about 45 minutes? Is that okay with you guys?</p> <p>25 MR. AIJAZ: That works.</p> <p style="text-align: right;">Page 92</p>
<p>1 when we were talking about the initial disclosure number.</p> <p>2 Q What is the time period applicable to restitution in this</p> <p>3 case? In other words, how far did it go back?</p> <p>4 A It would be three years from September 25th, 2019, so</p> <p>5 September 25th, 2016.</p> <p>6 Q For MGI?</p> <p>7 A No, for all defendants.</p> <p>8 Q MGI wasn't sued until recently, right?</p> <p>9 A Our position is that the complaint would -- it would relate</p> <p>10 back even as to MGL.</p> <p>11 Q Even though the FTC didn't sue MGL?</p> <p>12 A That's our position.</p> <p>13 Q Okay. Now you're a lawyer advocating.</p> <p>14 MR. AIJAZ: Objection, argumentative.</p> <p>15 THE WITNESS: I'm just stating our position.</p> <p>16 BY MR. HUMMEL:</p> <p>17 Q In other words, your position is restitution three years</p> <p>18 back from September 25th, 2019?</p> <p>19 A Yes, three years back from that date.</p> <p>20 Q And how far back for civil penalties?</p> <p>21 A It would be five years from that date, so that would be</p> <p>22 2014.</p> <p>23 Q And what is a violation for purposes of calculating civil</p> <p>24 penalties in a ROSCA case like this?</p> <p>25 A Well, you know, it would be every consumer who tried to</p> <p style="text-align: right;">Page 91</p>	<p>1 MR. HUMMEL: So, it's ten to one now. Why don't we</p> <p>2 come back at 1:40?</p> <p>3 MR. AIJAZ: 1:40?</p> <p>4 MR. HUMMEL: Is that okay with you?</p> <p>5 (Recess taken at 12:51 p.m., and resuming at 1:48 p.m.)</p> <p>6 THE VIDEOGRAPHER: We're back on the record. This is</p> <p>7 media unit number four. The time is 1:48 p.m.</p> <p>8 EXAMINATION (Continuing)</p> <p>9 BY MR. HUMMEL:</p> <p>10 Q Mr. Bandy, good afternoon.</p> <p>11 A Good afternoon.</p> <p>12 Q You understand you're still under oath?</p> <p>13 A I do.</p> <p>14 Q And you're still designee for the FTC for topics identified</p> <p>15 in the notice?</p> <p>16 A Yes.</p> <p>17 Q Let's look at Exhibit 3, which is the Amended Complaint in</p> <p>18 this case. And I'll call your attention, please, to page 25,</p> <p>19 which has listed count five, alleged failure to provide a simple</p> <p>20 mechanism for consumers to stop recurring charges. Do you see</p> <p>21 that?</p> <p>22 A I do.</p> <p>23 Q Okay. So, this is the ROSCA counter to the complaint</p> <p>24 alleging a violation of section four of ROSCA, 15 U.S.C. 8403,</p> <p>25 correct?</p> <p style="text-align: right;">Page 93</p>

<p>1 A Yes.</p> <p>2 Q All right. Do you see in paragraph 86, the complaint says,</p> <p>3 in numerous instances in connection with charging consumers for</p> <p>4 goods or services sold in transactions effected on the Internet</p> <p>5 through a negative option feature as described in paragraphs 54</p> <p>6 through 60 above. Defendants have failed to provide simple</p> <p>7 mechanisms for a consumer to stop recurring charges from being</p> <p>8 placed the consumer's credit card, debit card, bank account or</p> <p>9 other financial account. My question is this. What does</p> <p>10 numerous mean? Does that mean numerous consumers can't do it?</p> <p>11 A Many, it means many, in many instances, in numerous --</p> <p>12 many, lots.</p> <p>13 Q But numerous refers to consumers, not the number of</p> <p>14 mechanisms?</p> <p>15 MR. AIJAZ: Objection, vague.</p> <p>16 MR. HUMMEL: Do you understand what I mean? It just</p> <p>17 says, in numerous instances. Does that mean --</p> <p>18 THE WITNESS: Numerous defendants have failed to</p> <p>19 provide a simple mechanism for a consumer to stop recurring</p> <p>20 charges.</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q Right. But the allegation here is that the online flow is</p> <p>23 not simple, correct?</p> <p>24 MR. AIJAZ: Objection, misstates the testimony.</p> <p>25 THE WITNESS: The online -- yes, we allege that the,</p> <p style="text-align: right;">Page 94</p>	<p>1 A It's not relevant for purposes of this count.</p> <p>2 Q What about chat, same thing?</p> <p>3 A Same thing.</p> <p>4 Q Phone, same thing?</p> <p>5 A Correct.</p> <p>6 Q So, does this online cancelation mechanism apply only to</p> <p>7 those consumers who subscribed online?</p> <p>8 A Yes.</p> <p>9 Q Okay. For purposes of the online cancelation flow, can you</p> <p>10 describe what simple means?</p> <p>11 MR. AIJAZ: Objection, that's outside the scope of the</p> <p>12 notice.</p> <p>13 THE WITNESS: Yes, a flow that is easy to find and</p> <p>14 easy to use.</p> <p>15 BY MR. HUMMEL:</p> <p>16 Q What does easy mean?</p> <p>17 A Not difficult.</p> <p>18 Q Would you agree with me that the ROSCA statute does not</p> <p>19 define simple?</p> <p>20 A Yes.</p> <p>21 Q And when you say easy to find and easy to use, that is not</p> <p>22 difficult. That is for the reasonable consumer, right?</p> <p>23 MR. AIJAZ: Objection, form and calls for legal</p> <p>24 conclusion.</p> <p>25 THE WITNESS: Yes.</p> <p style="text-align: right;">Page 96</p>
<p>1 the -- well, the online cancelation flow is not a simple</p> <p>2 mechanism.</p> <p>3 BY MR. HUMMEL:</p> <p>4 Q Okay. I'm going to use your phrase. Online cancelation</p> <p>5 flow, okay. Now, in the -- paragraph 86, it says, defendants</p> <p>6 have failed to provide simple mechanisms. Again, referring to</p> <p>7 the online cancelation flow? Can you tell me --</p> <p>8 MR. AIJAZ: Objection, misstates the testimony.</p> <p>9 Sorry, I should have waited.</p> <p>10 MR. HUMMEL: Thank you.</p> <p>11 BY MR. HUMMEL:</p> <p>12 Q Can you tell me the mechanisms that Match does offer for</p> <p>13 consumers to stop recurring charges?</p> <p>14 MR. AIJAZ: Objection, misstates the testimony.</p> <p>15 THE WITNESS: Again, I don't understand your question.</p> <p>16 Is it referring to this paragraph or in general?</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q In general, what mechanisms does Match offer for consumers</p> <p>19 to stop recurring charges?</p> <p>20 A So, it is my understanding that consumers can cancel their</p> <p>21 Match auto-renew subscription through the online cancelation</p> <p>22 flow by email, phone call to customer care, facsimile, mail and</p> <p>23 online chat. Yes.</p> <p>24 Q Is it the FTC's contention that email cancelation is not</p> <p>25 simple?</p> <p style="text-align: right;">Page 95</p>	<p>1 BY MR. HUMMEL:</p> <p>2 Q And you agree that ROSCA does not require an online</p> <p>3 cancelation mechanism, correct?</p> <p>4 MR. AIJAZ: Objection, calls for legal conclusion,</p> <p>5 outside the scope of the notice.</p> <p>6 THE WITNESS: It's not stated in the statute. I agree</p> <p>7 with that.</p> <p>8 BY MR. HUMMEL:</p> <p>9 Q And you would agree that Match.com offers an online method</p> <p>10 to cancel subscriptions for subscribers who registered through</p> <p>11 the website, correct?</p> <p>12 A There is a way for consumers who signed up online to cancel</p> <p>13 online.</p> <p>14 Q Now, I want to explore some of the factors that might be</p> <p>15 used to evaluate whether something is easy to use or not, or</p> <p>16 easy to find, okay?</p> <p>17 A Okay.</p> <p>18 Q One would be time to completion. Do you agree with that?</p> <p>19 A Sure.</p> <p>20 Q Okay. And is there any objective standard against which</p> <p>21 the FTC measures simplicity with respect to time of completion?</p> <p>22 MR. AIJAZ: Objection, outside the scope of the</p> <p>23 notice.</p> <p>24 THE WITNESS: So, when you say objective, I just think</p> <p>25 reasonable person standard. So, it would be measured by a</p> <p style="text-align: right;">Page 97</p>

<p>1 reasonable person, their experience under the similar facts and 2 circumstances.</p> <p>3 BY MR. HUMMEL:</p> <p>4 Q Okay. So, does the FTC have in mind a maximum time that a 5 reasonable consumer or subscriber of Match.com could take to 6 cancel their subscription online?</p> <p>7 A No.</p> <p>8 Q Is that issue relevant in terms of evaluating simplicity, 9 in your view?</p> <p>10 MR. AIJAZ: Objection, form.</p> <p>11 THE WITNESS: Not really.</p> <p>12 BY MR. HUMMEL:</p> <p>13 Q Okay. What about the number of clicks it takes to complete 14 the transaction, the cancelation?</p> <p>15 MR. AIJAZ: Objection.</p> <p>16 THE WITNESS: I don't understand.</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q Is that issue relevant to whether or not -- the number of 19 clicks, is it relevant to whether or not a canceling mechanism 20 is simple or not?</p> <p>21 MR. AIJAZ: Objection as to scope.</p> <p>22 THE WITNESS: Could be, sure.</p> <p>23 BY MR. HUMMEL:</p> <p>24 Q And the question of whether or not a cancelation mechanism 25 is simple, online cancelation is simple, you'd also want to look</p> <p style="text-align: right;">Page 98</p>	<p>1 MR. AIJAZ: Same objection.</p> <p>2 THE WITNESS: We have been over that repeatedly. My 3 answer is still the same.</p> <p>4 BY MR. HUMMEL:</p> <p>5 Q And whether or not the website contains -- or the 6 cancelation flow contains clear labels, understandable labels, 7 that is a factor that could be considered in determining whether 8 or not cancelation flow is simple, correct?</p> <p>9 MR. AIJAZ: Objection, vague and scope.</p> <p>10 THE WITNESS: I'm not sure what I understand -- what 11 you mean by clear labels.</p> <p>12 BY MR. HUMMEL:</p> <p>13 Q Well, in the Match.com cancelation flow, I think you 14 described the steps that would be taken. You first have to 15 click on the gear. Then you click on "manage subscription". 16 Does the FTC contend that those links are not clear?</p> <p>17 MR. AIJAZ: Objection, misstates the testimony.</p> <p>18 THE WITNESS: I think that's more about difficulty in 19 finding the cancelation flow. I think I'd use the term, clear 20 verbiage, clear wording. And that -- when I said that, I was 21 more referring to things like the "before you go" language, 22 after the, you know, canceled subscription link, that that's not 23 clear. When the "continue" button was on the save offer, that's 24 not clear.</p> <p>25 Things that -- the wording that makes it ambiguous</p> <p style="text-align: right;">Page 100</p>
<p>1 at whether consumers can find the cancelation flow, correct?</p> <p>2 MR. AIJAZ: Objection, form and scope.</p> <p>3 THE WITNESS: Right, the first thing is easy to find, 4 right?</p> <p>5 BY MR. HUMMEL:</p> <p>6 Q Easy to find?</p> <p>7 A So, if it's not easy to find, then it's not simple.</p> <p>8 Q How would you evaluate that, whether something is easy to 9 find?</p> <p>10 A I think it's an objective standard based on, you know, what 11 a reasonable consumer's experience on the website would be.</p> <p>12 Q What evidence would you look at?</p> <p>13 A We could just look at the website.</p> <p>14 Q So, facial review.</p> <p>15 MR. AIJAZ: Objection as to scope.</p> <p>16 THE WITNESS: Among other things.</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q What other things?</p> <p>19 A I don't know, but that's one thing you could look at.</p> <p>20 Q You could also study it, right? You could ask a series of 21 consumers, hey, look at this website. Where would you go to 22 find your subscription cancelation flow?</p> <p>23 A Sure, you could do that. It's possible.</p> <p>24 Q And the FTC, to your knowledge, has not done that kind of 25 study?</p> <p style="text-align: right;">Page 99</p>	<p>1 what the consumer -- like, how to cancel. If you have consumers 2 who are, who are confused by -- if the language is confusing to 3 a reasonable consumer, then that would be a factor that would 4 make a mechanism simple. It's essentially the cancelation 5 mechanism is something consumers can't use because it's 6 confusing.</p> <p>7 BY MR. HUMMEL:</p> <p>8 Q Isn't it true that the only way to evaluate whether 9 something is confusing to a consumer is to do an empirical 10 study?</p> <p>11 A No.</p> <p>12 MR. AIJAZ: Objection, calls for legal conclusion.</p> <p>13 BY MR. HUMMEL:</p> <p>14 Q Is one factor in assessing whether a cancelation flow is 15 simple or not its effectiveness?</p> <p>16 MR. AIJAZ: Objection, vague.</p> <p>17 THE WITNESS: Could be relevant. Could be relevant.</p> <p>18 BY MR. HUMMEL:</p> <p>19 Q In other words, the percentage of consumers who attempt to 20 cancel using a flow and succeed, that could be relevant?</p> <p>21 A Sure.</p> <p>22 Q What would be the -- if you know, the sort of objective 23 standard for whether or not any particular percentage of 24 effectiveness, as I just defined it, would constitute not 25 simple?</p> <p style="text-align: right;">Page 101</p>

<p>1 MR. AIJAZ: Objection, scope.</p> <p>2 THE WITNESS: I don't think there's a set percentage</p> <p>3 amount. I think you'd have to look at it based on the data that</p> <p>4 you had, the facts and circumstances.</p> <p>5 BY MR. HUMMEL:</p> <p>6 Q So, it's possible that if 80 percent of consumers</p> <p>7 effectively canceled once they entered the flow, that would be</p> <p>8 strong evidence that the flow is simple?</p> <p>9 MR. AIJAZ: Objection, speculation.</p> <p>10 THE WITNESS: I would say that's probably strong</p> <p>11 evidence it's not simple.</p> <p>12 BY MR. HUMMEL:</p> <p>13 Q So, what is the number?</p> <p>14 A Twenty percent just seems a lot for people who have found</p> <p>15 the flow but can't complete it. That seems like a lot, just in</p> <p>16 my personal view.</p> <p>17 Q Sure. I didn't say, can't complete it. I said, didn't</p> <p>18 complete it.</p> <p>19 A Didn't complete it.</p> <p>20 Q All right. And there are certainly, as we talked about it</p> <p>21 before, there are a number of reasons why somebody might not</p> <p>22 complete it when they enter, right?</p> <p>23 A I mean, of the reasons you gave, I acknowledge that perhaps</p> <p>24 the save offer was a possibility. The other reasons that you</p> <p>25 speculated on seemed a little far-fetched to me. So, I would</p> <p style="text-align: right;">Page 102</p>	<p>1 context, you know, is something that makes the mechanism not</p> <p>2 simple.</p> <p>3 Q And you keep saying that, in this circumstance, consumers</p> <p>4 don't typically have to enter their password to use the site.</p> <p>5 What's your basis for that?</p> <p>6 A That's the information that was told to me.</p> <p>7 Q By whom?</p> <p>8 A By the case team.</p> <p>9 Q By counsel?</p> <p>10 MR. AIJAZ: Objection, attorney-client privilege.</p> <p>11 Don't answer.</p> <p>12 BY MR. HUMMEL:</p> <p>13 Q Okay. You don't have any evidence of the percentage of</p> <p>14 consumers who attempt to cancel -- strike that. You don't have</p> <p>15 any evidence of the percentage of consumers who want to log on</p> <p>16 to the site, to their Match.com profile, who don't have to enter</p> <p>17 a password, correct?</p> <p>18 MR. AIJAZ: Objection, form.</p> <p>19 THE WITNESS: I don't understand the question. Repeat</p> <p>20 it. Repeat it.</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q Sure. So, you don't have any evidence of the percentage of</p> <p>23 consumers who tried to log on to their profile or account on</p> <p>24 Match.com who don't have to enter their password?</p> <p>25 A I don't know. I don't know. My understanding is that if</p> <p style="text-align: right;">Page 104</p>
<p>1 say, other than the save offer, I don't think I heard anything</p> <p>2 from you that suggests a plausible reason why someone would</p> <p>3 abandon the cancellation flow midstream.</p> <p>4 Q What about if you're in the flow and the doorbell rings and</p> <p>5 you just forget?</p> <p>6 MR. AIJAZ: Objection, speculation.</p> <p>7 THE WITNESS: So, that's a reason. But to have that</p> <p>8 be of such high level of frequency that it would make a</p> <p>9 difference, I'm skeptical of it. But that's my personal view.</p> <p>10 BY MR. HUMMEL:</p> <p>11 Q Right, and there are a number of other reasons why a</p> <p>12 consumer who was in the cancellation flow might get distracted</p> <p>13 and not complete, right?</p> <p>14 A Sure, I mean, anything's possible.</p> <p>15 Q And whether or not there's a password wall, that is a</p> <p>16 factor that you would consider in whether or not, in total, a</p> <p>17 cancellation flow is not simple, correct?</p> <p>18 A In context, sure. In the context here, I think it makes a</p> <p>19 difference. I think the presence of a password requirement to</p> <p>20 cancel is not, you know, per se makes a mechanism not simple.</p> <p>21 But in this context here, where you've got a user base that</p> <p>22 typically does not have to enter their password, you know, that</p> <p>23 additional step, especially when it was flagged by Match</p> <p>24 employees as being a source of people not canceling or not</p> <p>25 abandoning the cancel flow, I think that, in this particular</p> <p style="text-align: right;">Page 103</p>	<p>1 the browser has cookies enabled that they don't have to enter</p> <p>2 their password. Maybe they do the first time, but when they go</p> <p>3 back to the website, they don't have to enter the password to --</p> <p>4 and to use the site's features.</p> <p>5 Q Sure. And again, that information is something you</p> <p>6 received from counsel?</p> <p>7 MR. AIJAZ: Objection, attorney-client privilege.</p> <p>8 Don't answer.</p> <p>9 BY MR. HUMMEL:</p> <p>10 Q Do you have any other basis for that statement other than</p> <p>11 what lawyers told you?</p> <p>12 A That is my understanding, but I did not specifically look</p> <p>13 at documents on that particular point.</p> <p>14 Q I am asking a different question, which is, do you have any</p> <p>15 source for that understanding other than what lawyers told you?</p> <p>16 MR. AIJAZ: Objection, attorney-client privilege.</p> <p>17 THE WITNESS: I'm thinking. Well, there's a common</p> <p>18 sense point that, that made me not question it, which is that if</p> <p>19 consumers have to routinely enter their password to use the</p> <p>20 site, then why would it be necessary for them to enter their</p> <p>21 password to then access the cancellation flow? Why would you ask</p> <p>22 them to enter the password twice?</p> <p>23 BY MR. HUMMEL:</p> <p>24 Q Well, if a consumer does have to input their password to</p> <p>25 access their account, would you agree that having a password</p> <p style="text-align: right;">Page 105</p>

<p>1 CERTIFICATE OF COURT REPORTER</p> <p>2 I, Linda C. Marshall, certify that the foregoing is a</p> <p>3 correct transcript from the record of proceedings in the</p> <p>4 above-entitled matter.</p> <p>5</p> <p>6</p> <p>7 </p> <p>8 Linda C. Marshall, RPK</p> <p>9 Official Court Reporter</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 122</p>	<p>1 Federal Trade Commission v. Match Group, Inc., Et Al.</p> <p>2 Bikram Bandy 5535418</p> <p>3 ACKNOWLEDGEMENT OF DEPONENT</p> <p>4 I, Bikram Bandy, do hereby declare that I</p> <p>5 have read the foregoing transcript, I have made any</p> <p>6 corrections, additions, or changes I deemed necessary as</p> <p>7 noted above to be appended hereto, and that the same is</p> <p>8 a true, correct and complete transcript of the testimony</p> <p>9 given by me.</p> <p>10</p> <p>11 _____</p> <p>12 Bikram Bandy Date</p> <p>13 *If notary is required</p> <p>14 SUBSCRIBED AND SWORN TO BEFORE ME THIS</p> <p>15 _____ DAY OF _____, 20____.</p> <p>16</p> <p>17 _____</p> <p>18</p> <p>19 NOTARY PUBLIC</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 124</p>
<p>1 Federal Trade Commission v. Match Group, Inc., Et Al.</p> <p>2 Bikram Bandy Job No. 5535418</p> <p>3 E R R A T A S H E E T</p> <p>4 PAGE _____ LINE _____ CHANGE _____</p> <p>5 _____</p> <p>6 REASON _____</p> <p>7 PAGE _____ LINE _____ CHANGE _____</p> <p>8 _____</p> <p>9 REASON _____</p> <p>10 PAGE _____ LINE _____ CHANGE _____</p> <p>11 _____</p> <p>12 REASON _____</p> <p>13 PAGE _____ LINE _____ CHANGE _____</p> <p>14 _____</p> <p>15 REASON _____</p> <p>16 PAGE _____ LINE _____ CHANGE _____</p> <p>17 _____</p> <p>18 REASON _____</p> <p>19 PAGE _____ LINE _____ CHANGE _____</p> <p>20 _____</p> <p>21 REASON _____</p> <p>22 _____</p> <p>23 _____</p> <p>24 Bikram Bandy Date</p> <p>25</p> <p style="text-align: right;">Page 123</p>	<p>1 maijaz@ftc.gov</p> <p>2 November 10, 2022</p> <p>3 Federal Trade Commission v. Match Group, Inc., Et Al.</p> <p>4 DEPOSITION OF: Bikram Bandy 5535418</p> <p>5 The above-referenced witness transcript is</p> <p>6 available for read and sign.</p> <p>7 Within the applicable timeframe, the witness</p> <p>8 should read the testimony to verify its accuracy. If</p> <p>9 there are any changes, the witness should note those</p> <p>10 on the attached Errata Sheet.</p> <p>11 The witness should sign and notarize the</p> <p>12 attached Errata pages and return to Veritext at</p> <p>13 errata-tx@veritext.com.</p> <p>14 According to applicable rules or agreements, if</p> <p>15 the witness fails to do so within the time allotted,</p> <p>16 a certified copy of the transcript may be used as if</p> <p>17 signed.</p> <p>18 Yours,</p> <p>19 Veritext Legal Solutions</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 125</p>

# EXHIBIT 11

Redacted in its Entirety

(Filed Under Seal Pursuant to Protective  
Order Regarding Confidential Materials)

# EXHIBIT 11

CONFIDENTIAL

UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF TEXAS  
DALLAS DIVISION

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FEDERAL TRADE COMMISSION,

Plaintiff,

vs.

No. 3:19-cv-02281-K

MATCH GROUP, INC., a  
corporation, MATH GROUP, LLC,  
formerly MATCH.COM, LLC, a  
Limited Liability Company,

Defendants.

\_\_\_\_\_/

DEPOSITION OF  
JENNIFER KING, PH.D.

\*\*\*CONFIDENTIAL\*\*\*

\_\_\_\_\_  
THURSDAY, JULY 27, 2023

REPORTED BY: HOLLY THUMAN, CSR No. 6834, RMR, CRR  
JOB NUMBER 6028094

Page 1



CONFIDENTIAL

<p>1 in this case?</p> <p>2 A. I have.</p> <p>3 Q. And you have provided two separate expert</p> <p>4 reports. Right?</p> <p>5 A. A rebuttal -- yes, an expert and a rebuttal,</p> <p>6 yes.</p> <p>7 Q. Right. And as of the date of the initial</p> <p>8 expert report, which we've marked as Exhibit 1, and</p> <p>9 here are some copies --</p> <p>10 A. Thank you.</p> <p>11 Q. Here's the official version.</p> <p>12 Do you need one?</p> <p>13 MR. AIJAZ: If you have an extra. If you</p> <p>14 don't --</p> <p>15 MR. HUMMEL: I do.</p> <p>16 MR. AIJAZ: Thank you.</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q. Is Exhibit 1 a copy of the expert report you</p> <p>19 submitted in this case on January 13, 2023?</p> <p>20 A. Uh-huh.</p> <p>21 Q. Is that yes?</p> <p>22 A. Yes. Sorry.</p> <p>23 Q. All right. And Exhibit 2.</p> <p>24 Exhibit 2 is a copy of the rebuttal report you</p> <p>25 prepared and submitted in this case?</p> <p style="text-align: right;">Page 6</p>	<p>1 A. I have.</p> <p>2 Q. You understand you're under oath?</p> <p>3 A. Of course.</p> <p>4 Q. Any reason you can't give your best testimony</p> <p>5 here today?</p> <p>6 A. No.</p> <p>7 Q. One of the rules we have to follow is that I</p> <p>8 will try my best to let you finish your answer --</p> <p>9 A. Uh-huh.</p> <p>10 Q. -- without interrupting you --</p> <p>11 A. Sure.</p> <p>12 Q. -- if you also allow me to finish my question</p> <p>13 so that it's a clean question and answer for the court</p> <p>14 reporter.</p> <p>15 A. Of course.</p> <p>16 Q. Okay. If there's a question that I ask you</p> <p>17 that you don't understand, you have every right and</p> <p>18 ability to ask me to clarify it or to tell me you don't</p> <p>19 understand it.</p> <p>20 A. Sure.</p> <p>21 Q. If you go ahead and answer a question, the</p> <p>22 trier of fact in this case, and we will argue, that you</p> <p>23 understood the question and gave a complete and full</p> <p>24 answer to my question.</p> <p>25 Do you understand that?</p> <p style="text-align: right;">Page 8</p>
<p>1 A. Yes, it is.</p> <p>2 Q. How much time did you spend preparing the</p> <p>3 initial expert report dated January 13, 2023?</p> <p>4 A. I -- you know, I could, obviously, go back and</p> <p>5 look at my hours to be precise, but I think around the</p> <p>6 neighborhood of about 80 hours.</p> <p>7 Q. And you were assisted by two people?</p> <p>8 A. I was.</p> <p>9 Q. Who are those folks?</p> <p>10 A. Janiya Peters -- actually, sorry, three</p> <p>11 people.</p> <p>12 Two at the beginning -- sorry.</p> <p>13 Two for the first report; three for the final</p> <p>14 report. I --</p> <p>15 Q. Let me -- talk to me about the two people --</p> <p>16 (The reporter requested that people not speak</p> <p>17 at once.)</p> <p>18 THE WITNESS: Janiya Peters and</p> <p>19 Caroline Sindors.</p> <p>20 BY MR. HUMMEL:</p> <p>21 Q. Okay. And how are they employed?</p> <p>22 A. Janiya Peters is a Ph.D. candidate at</p> <p>23 UC Berkeley, and Caroline Sindors is an independent</p> <p>24 researcher based out of London.</p> <p>25 Q. You've been deposed before?</p> <p style="text-align: right;">Page 7</p>	<p>1 A. Yes, I do.</p> <p>2 Q. Okay. So the two people that you referenced</p> <p>3 that assisted you in your first report, what did they</p> <p>4 do?</p> <p>5 A. Both of them assisted me with the heuristic</p> <p>6 analysis. I mean, they -- I, of course, am the expert.</p> <p>7 I did the full and complete analysis, but they provided</p> <p>8 me with their opinions as well.</p> <p>9 Q. Do they provide those opinions in writing?</p> <p>10 A. They may have taken notes on their end, but</p> <p>11 generally, that was a collaborative process where we</p> <p>12 would meet online and discuss, and I took notes.</p> <p>13 Q. Did you rely on those notes in connection with</p> <p>14 preparing your expert report?</p> <p>15 A. The notes that I took?</p> <p>16 Q. Yeah.</p> <p>17 A. Yes.</p> <p>18 Q. Did you rely on any notes that these other two</p> <p>19 individuals took?</p> <p>20 A. I don't believe I have seen their notes, but I</p> <p>21 would need to double-check.</p> <p>22 Q. Do you know what guides or handbooks or</p> <p>23 workbooks they used, if any, in connection with their</p> <p>24 doing parts or pieces of a heuristic analysis?</p> <p>25 A. I don't believe they used any guide or</p> <p style="text-align: right;">Page 9</p>

<p>1 workbooks.</p> <p>2 Q. How were they guided, if you know, in what to</p> <p>3 look for in a heuristic analysis?</p> <p>4 A. Well, I mean, we were all familiar with</p> <p>5 Nielsen's Ten Heuristics. That's why I work with them.</p> <p>6 Q. And by "Nielsen's Ten Heuristics," can you</p> <p>7 define what you mean?</p> <p>8 A. Jakob Nielsen's 10 Usability Heuristics. I</p> <p>9 don't have them memorized, but I'll be happy to read</p> <p>10 them off if you have a copy of that article.</p> <p>11 Q. I do, and we'll talk about that later.</p> <p>12 Do you know what the Nielsen Norman Group is?</p> <p>13 A. I sure do.</p> <p>14 Q. So what is it?</p> <p>15 A. So it's a consulting firm that was founded by</p> <p>16 Jakob Nielsen and Professor Donald Norman. I'm not</p> <p>17 sure when; mid- or late '90s.</p> <p>18 But Nielsen was a usability expert and</p> <p>19 researcher, I believe, at Sun Microsystems.</p> <p>20 Donald Norman's been a professor of cognitive</p> <p>21 psych at UC San Diego, I think, for decades.</p> <p>22 And so they formed a research and consulting</p> <p>23 group during the first dot-com boom.</p> <p>24 Q. Do you consider the Nielsen Norman Group to</p> <p>25 have authoritative expertise in the field of usability?</p> <p style="text-align: right;">Page 10</p>	<p>1 you were asking; heuristic analysis and --</p> <p>2 Q. How much time you actually spent looking at</p> <p>3 the website versus how much time you spent doing the</p> <p>4 heuristic analysis versus the writing.</p> <p>5 A. I mean, that's hard to say because you go back</p> <p>6 and look at the website continuously as you're writing.</p> <p>7 But, you know, as an independent task, looking</p> <p>8 at the website, I'm going to guess in the magnitude of</p> <p>9 5 to 10 hours.</p> <p>10 Q. Do you agree that the purpose of heuristic</p> <p>11 analysis or a heuristic evaluation is to find usability</p> <p>12 problems on an interface?</p> <p>13 A. Yes.</p> <p>14 Q. Okay. And do you agree that a heuristic</p> <p>15 evaluation is difficult for a single individual to do</p> <p>16 because one person will never be able to find all the</p> <p>17 usability problems on an interface?</p> <p>18 A. I disagree that it's difficult to do. I think</p> <p>19 you have to understand Nielsen's framing of what a</p> <p>20 heuristic analysis is supposed to accomplish.</p> <p>21 So it -- if I may, Nielsen developed this --</p> <p>22 this method in order to give practitioners a way to</p> <p>23 provide a -- a concise analysis without the need or</p> <p>24 requirement to engage in user testing in order to spot</p> <p>25 a handful of particular canonical usability issues.</p> <p style="text-align: right;">Page 12</p>
<p>1 A. I do.</p> <p>2 Q. Can you tell me how much time each of the</p> <p>3 individuals who worked on your heuristic analysis with</p> <p>4 you spent analyzing Match.com cancellation web flows?</p> <p>5 A. I would have to look at my record. I don't</p> <p>6 remember off the top of my head. Not as much as me,</p> <p>7 but --</p> <p>8 Q. And how much did you spend doing your</p> <p>9 heuristic analysis?</p> <p>10 A. I would have to go back to my records. I</p> <p>11 don't have a clear division of that piece versus the</p> <p>12 writing piece versus, you know, everything else.</p> <p>13 Q. So, as you sit here today, you can't discern</p> <p>14 between the amount of time you spent doing the analysis</p> <p>15 versus the analysis -- excuse me, the heuristic study</p> <p>16 versus the analysis versus the writing?</p> <p>17 MR. AIJAZ: Objection. Misstates testimony.</p> <p>18 THE WITNESS: I mean, I can estimate for you.</p> <p>19 BY MR. HUMMEL:</p> <p>20 Q. Please.</p> <p>21 A. Okay. So I probably spent in the order of</p> <p>22 5 to 10 hours working through the heuristic analysis.</p> <p>23 I'm trying to remember how much time I spent writing.</p> <p>24 There was a lot of writing.</p> <p>25 And, I'm sorry, what was the other piece of it</p> <p style="text-align: right;">Page 11</p>	<p>1 So it comes out of a tradition I would argue</p> <p>2 he started called "discount usability." This was back</p> <p>3 in the early '90s, mid-1990s, and he was essentially</p> <p>4 trying to develop this method in order to, I would say,</p> <p>5 democratize, essentially, this practice to make it more</p> <p>6 widespread.</p> <p>7 So it is a way of identifying errors without</p> <p>8 having to engage in user testing.</p> <p>9 That said, it does not necessarily uncover all</p> <p>10 errors, and user testing can also find different</p> <p>11 errors.</p> <p>12 Q. You did not do a usability study. Correct?</p> <p>13 A. I did not do a usability study.</p> <p>14 Q. Is it true, as Jakob Nielsen wrote in</p> <p>15 November 1, 1994, in his article called "How to Conduct</p> <p>16 a Heuristic Analysis," that the output from using the</p> <p>17 heuristic evaluation method is a list of usability</p> <p>18 problems in the interface with references to those</p> <p>19 usability principles that were violated by the design</p> <p>20 in each case in the opinion of the evaluator?</p> <p>21 A. Yeah.</p> <p>22 MR. AIJAZ: Objection. Form.</p> <p>23 THE WITNESS: Sorry.</p> <p>24 I mean, as you have read that definition, I --</p> <p>25 yes, I agree with the way he has described it.</p> <p style="text-align: right;">Page 13</p>

<p>1 MR. AIJAZ: And, Chad, I just ask if you're 2 going to read long passages and ask her to agree or 3 disagree that you provide it to her so that she could 4 review it. 5 MR. HUMMEL: Okay. Noted. 6 Q. Do you agree that the results of the 7 evaluation should be recorded either as written reports 8 from each evaluator, or by having the evaluators 9 verbalize their comments to an observer as they go 10 through the interface? 11 MR. AIJAZ: Objection. Form. 12 THE WITNESS: I mean, yes. As far as what 13 Nielsen has said, yeah. 14 BY MR. HUMMEL: 15 Q. Your assignment in this case from the FTC was 16 twofold. Correct? 17 A. If you are referring to the two questions on 18 page 3 of my report, yes. We -- it was -- well, I'll 19 allow you to ask me. 20 Q. I am. 21 In your report, you write: 22 "The FTC asked me to evaluate Match.com's 23 cancellation flow based on the following 24 inquiries: one, was Match.com's cancellation 25 flow easy to use; and, two, was Match.com's</p> <p style="text-align: right;">Page 14</p>	<p>1 BY MR. HUMMEL: 2 Q. Okay. 3 A. -- and it is my understanding that they 4 believe that the cancellation process was not simple to 5 use and that a number of consumers would have not been 6 able to complete it. 7 Q. Okay. So -- and do you understand that the 8 FTC alleges that the Match cancellation flow over time 9 has violated the Restore Online Shoppers Confidence 10 Act? 11 A. I'm not a lawyer, but to the best of my 12 understanding of that, yes. 13 Q. Have you read ROSCA? 14 A. Yes. 15 Q. What guidance does ROSCA give to companies in 16 the statute itself as to what the meaning of "simple" 17 is? 18 MR. AIJAZ: Objection. Calls for a legal 19 conclusion -- legal analysis, rather. 20 THE WITNESS: I -- I mean, I'd like to look at 21 ROSCA again, but I don't recall. 22 BY MR. HUMMEL: 23 Q. What guidance, if you know, has the FTC 24 publicly given to companies about how methods of 25 cancellation can comply with ROSCA's admonition that a</p> <p style="text-align: right;">Page 16</p>
<p>1 cancellation process easy to find?" 2 And I said "flow" in the first one. It says 3 "process." Right? 4 A. Yes. 5 Q. So were those the two inquiries that the FTC 6 asked you to examine? 7 A. Yes. 8 Q. And does "easy" mean simple? 9 MR. AIJAZ: Objection. Calls for a legal 10 conclusion. 11 THE WITNESS: I assumed that "easy" was 12 another word for simple as I did this analysis. 13 BY MR. HUMMEL: 14 Q. You used them synonymously? 15 A. Yes. 16 Q. Okay. Do you -- do you understand the 17 allegations that the FTC has made in this case about 18 the Match.com online cancellation flow over time? 19 A. I mean, I believe I do, but is there something 20 specific you are -- 21 Q. What's your understanding? 22 MR. AIJAZ: Objection. Vague. 23 THE WITNESS: Well, I have certainly read the 24 complaint -- 25</p> <p style="text-align: right;">Page 15</p>	<p>1 cancellation flow be simple? 2 MR. AIJAZ: Objection. Scope. It's outside 3 her area of expertise, and also, again, it calls for a 4 legal analysis. 5 THE WITNESS: I am familiar with the FTC.com 6 disclosures and their guidance on negative -- negative 7 option continuity plans. 8 But I can't remember off the top of my head if 9 that specifically addresses cancellation as we've been 10 discussing it here. 11 BY MR. HUMMEL: 12 Q. The second publication, Ms. King, that you 13 referenced does provide guidance on the meaning of 14 "simplicity." 15 A. Okay. 16 Q. And, basically, what it says is that the 17 cancellation flow has to be at least as easy to use as 18 the method used to subscribe. Right? 19 A. Yes. 20 MR. AIJAZ: Objection. Lacks foundation. 21 BY MR. HUMMEL: 22 Q. What analysis did you do, if any, for your 23 initial report to compare the relative simplicity of 24 the methods consumers used to sign up for Match.com 25 versus the cancellation method?</p> <p style="text-align: right;">Page 17</p>

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<p>1 A. I did not -- I -- it was outside the scope of 2 my report to look at the sign-up process.</p> <p>3 Q. So you didn't attempt, did you, to evaluate 4 the FTC's own standard for evaluating simplicity. 5 Correct?</p> <p>6 MR. AIJAZ: Objection. Calls for legal 7 analysis. Outside the scope of her expertise.</p> <p>8 THE WITNESS: I'm not sure that that is a 9 standard. My sense is that it's a recommendation; but, 10 no, I did not look at the cancellation flow -- I mean, 11 sorry -- I apologize.</p> <p>12 I did not look at the sign-up flow 13 specifically.</p> <p>14 BY MR. HUMMEL:</p> <p>15 Q. Have you read the FTC's sworn testimony in 16 this case given pursuant to Rule 30(b)(6) of the 17 Federal Rules of Civil Procedure?</p> <p>18 MR. AIJAZ: Objection. Vague.</p> <p>19 THE WITNESS: I'm not sure what you mean, 20 actually.</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q. So the FTC designated a witness.</p> <p>23 A. Okay.</p> <p>24 Q. His name was Bikram Bandy, and he testified 25 under oath on behalf of the FTC; in fact, as the FTC</p> <p style="text-align: right;">Page 18</p>	<p>1 A. Yes.</p> <p>2 Q. All right. And who selected the screenshots 3 to use?</p> <p>4 Did you make the screenshots, or did the FTC 5 give you the screenshots?</p> <p>6 A. The FTC gave them to me.</p> <p>7 Q. Okay. And based on those, the videos -- the 8 three videos and the three sets of screenshots, you 9 attempted to evaluate whether Match.com's cancellation 10 process was simple and whether the cancellation process 11 was easy to find. Correct?</p> <p>12 A. I did. Yes.</p> <p>13 Q. All right. Now --</p> <p>14 MR. AIJAZ: I'll just say objection.</p> <p>15 Misstates the report.</p> <p>16 BY MR. HUMMEL:</p> <p>17 Q. Okay. So I asked the FTC what factors might 18 be relevant in assessing whether a cancellation flow 19 was simple or not.</p> <p>20 And if you can look at page 97.</p> <p>21 And one of the things I asked them was: Would 22 time to completion be a relevant standard or a relevant 23 factor in considering whether a flow is simple or not?</p> <p>24 That's at line 18 through 19 on page 97.</p> <p>25 So my question is this: For any of the flows</p> <p style="text-align: right;">Page 20</p>
<p>1 under the rule, and the deposition was on 2 October 24, 2022.</p> <p>3 Have you read that transcript?</p> <p>4 A. I have not.</p> <p>5 Q. All right. I'm going to put a copy in front 6 of you in case you want to reference it.</p> <p>7 I am for counsel as well, and I just want to 8 ask you if some of the things that the FTC considers 9 relevant in terms of evaluating whether a flow is 10 simple or not were things that you considered. Okay?</p> <p>11 A. Okay.</p> <p>12 Q. Before we do that, let me just ask you this:</p> <p>13 You evaluated three separate web flows.</p> <p>14 Right?</p> <p>15 A. Yes. Two thousand -- sorry.</p> <p>16 Go ahead.</p> <p>17 Q. 2016, 2019, and 2022. Correct?</p> <p>18 A. Yes.</p> <p>19 Q. And you viewed those on video. Right?</p> <p>20 A. I viewed them on video as well as static 21 screenshots.</p> <p>22 Q. And who chose the videos that were provided to 23 you to evaluate?</p> <p>24 A. They were provided to me by the FTC.</p> <p>25 Q. By counsel for the FTC?</p> <p style="text-align: right;">Page 19</p>	<p>1 that you evaluated, did you consider the average time 2 that it would take a consumer to start the cancellation 3 flow and to complete it?</p> <p>4 A. Okay. First, let me just verify: It's this 5 page with the yellow --</p> <p>6 Q. Yeah.</p> <p>7 A. Okay. Because there is a transcript page, and 8 then there's the actual --</p> <p>9 Q. Right, right --</p> <p>10 A. -- 97.</p> <p>11 (The reporter requested that people not speak 12 at once.)</p> <p>13 BY MR. HUMMEL:</p> <p>14 Q. I asked -- I asked the FTC on line 14:</p> <p>15 "QUESTION: I want to explore some of the 16 factors that might be used to evaluate whether 17 something is easy to use or not or easy to 18 find. Okay?"</p> <p>19 I didn't even have your report when I asked 20 that question. Turns out I asked the same questions of 21 the FTC that you were asked by the FTC to solve.</p> <p>22 Right?</p> <p>23 So, then, I said:</p> <p>24 "QUESTION: One would be time to 25 completion.</p> <p style="text-align: right;">Page 21</p>

<p>1 "Do you agree with that?"</p> <p>2 "ANSWER: Sure."</p> <p>3 So here's my question:</p> <p>4 A. Uh-huh.</p> <p>5 Q. Did you independently evaluate the average</p> <p>6 time it took for a user to complete the cancellation</p> <p>7 flow for any of the three flows that you -- that you</p> <p>8 examined?</p> <p>9 A. I did not.</p> <p>10 Q. Okay. And you would agree with the FTC that</p> <p>11 the question of whether or not a cancellation flow is</p> <p>12 simple is a, quote, "reasonable person standard," which</p> <p>13 is what the FTC testified to under oath on page 97,</p> <p>14 line 25.</p> <p>15 MR. AIJAZ: Objection. Calls for legal</p> <p>16 analysis. Outside the scope.</p> <p>17 THE WITNESS: Yeah. I mean, I -- I don't know</p> <p>18 specifically what you mean by "reasonable person" here.</p> <p>19 BY MR. HUMMEL:</p> <p>20 Q. I don't know either. That's what the FTC</p> <p>21 testified.</p> <p>22 Did you ever ask the FTC what they meant by</p> <p>23 "reasonable person standard"?</p> <p>24 A. No, I have not, but it was not a part of our</p> <p>25 discussion as far as I recall.</p> <p style="text-align: right;">Page 22</p>	<p>1 consumer to find the flow?</p> <p>2 MR. AIJAZ: Objection. Asked and answered.</p> <p>3 THE WITNESS: No, I did not.</p> <p>4 BY MR. HUMMEL:</p> <p>5 Q. Did you evaluate for any of the flows you</p> <p>6 looked at the average amount of time that it took a</p> <p>7 consumer -- strike that.</p> <p>8 Did you evaluate the maximum amount of time</p> <p>9 that it took a consumer to complete the flow?</p> <p>10 MR. AIJAZ: Objection. Asked and answered.</p> <p>11 THE WITNESS: No, I did not.</p> <p>12 BY MR. HUMMEL:</p> <p>13 Q. And I asked the FTC:</p> <p>14 "QUESTION: Is that issue relevant to</p> <p>15 whether or not a flow is simple or not?"</p> <p>16 But you didn't evaluate that.</p> <p>17 A. I did not evaluate maximum or minimum amounts</p> <p>18 of time.</p> <p>19 Q. Or average time?</p> <p>20 A. Or average time, no.</p> <p>21 Q. Okay. Now, the next thing I asked, if you</p> <p>22 look at page 98, lines 18 through 22, is:</p> <p>23 "QUESTION: Is the number of clicks</p> <p>24 relevant to whether or not a canceling</p> <p>25 mechanism is simple or not?"</p> <p style="text-align: right;">Page 24</p>
<p>1 Q. Okay. Now let's look at page 98:</p> <p>2 "QUESTION: Given the nature of the</p> <p>3 Match.com flows that you analyzed, do you</p> <p>4 believe there should have been a maximum time</p> <p>5 that a reasonable consumer or subscriber of</p> <p>6 Match.com could take to cancel their</p> <p>7 subscription on line?"</p> <p>8 A. I'm sorry. Can you repeat it?</p> <p>9 Q. Sure. And you can read the question. It's</p> <p>10 on --</p> <p>11 A. Oh, sorry.</p> <p>12 Q. -- page 99, line -- excuse me, page 98,</p> <p>13 starting on line 4.</p> <p>14 Do you believe, Ms. King, that there should be</p> <p>15 a maximum time that a reasonable consumer or subscriber</p> <p>16 of Match.com should take to cancel their subscription</p> <p>17 on line?</p> <p>18 MR. AIJAZ: Objection. Vague.</p> <p>19 THE WITNESS: No. Actually, I don't think</p> <p>20 that time is a determinative factor.</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q. Right. Not determinative.</p> <p>23 But did you -- in assessing whether or not the</p> <p>24 process is easy to use or whether it's easy to find,</p> <p>25 did you evaluate how much time on average it took a</p> <p style="text-align: right;">Page 23</p>	<p>1 And the witness said:</p> <p>2 "ANSWER: Could be. Sure."</p> <p>3 Now, I take it you did evaluate the number of</p> <p>4 clicks it takes to cancel on the Match.com flows that</p> <p>5 you evaluated. I think you wrote seven or eight.</p> <p>6 Right?</p> <p>7 A. So I measured steps. You can also measure</p> <p>8 clicks.</p> <p>9 I would not say that they are automatically</p> <p>10 synonymous, but I think steps, usually, is a -- I</p> <p>11 would -- I prefer to evaluate looking at steps rather</p> <p>12 than clicks just because I think clicks can potentially</p> <p>13 overmeasure in some cases.</p> <p>14 Q. I understand.</p> <p>15 And how many steps does it take during this</p> <p>16 time frame, 2019 through 2022 -- how many steps did it</p> <p>17 take for a user to subscribe to Match.com?</p> <p>18 A. So I think it depends on what you're meaning</p> <p>19 by "subscribe."</p> <p>20 I mean at what point of the process are you</p> <p>21 talking about?</p> <p>22 Q. From the time you log in to Match.com until</p> <p>23 you're a paying subscriber.</p> <p>24 A. I mean, does that include creating a</p> <p>25 profile --</p> <p style="text-align: right;">Page 25</p>



<p>1 Q. Sure.</p> <p>2 A. -- and filling out the profile?</p> <p>3 Q. Of course. You have to. Right?</p> <p>4 A. I don't know if you have to, actually.</p> <p>5 Q. Have you signed on?</p> <p>6 Have you become a member?</p> <p>7 A. I am not a member of Match.com.</p> <p>8 Q. Have you gone through the subscription</p> <p>9 process?</p> <p>10 A. I have never subscribed to Match.com.</p> <p>11 Q. But in connection with your examination of the</p> <p>12 issues presented to you in this case, have you</p> <p>13 evaluated the subscription process?</p> <p>14 A. I have not evaluated the subscription process.</p> <p>15 Q. Okay. Then I asked a question starting on</p> <p>16 page 98, going on to 99. And I asked the question:</p> <p>17 "QUESTION: And the question of whether or</p> <p>18 not a cancellation mechanism is simple, online</p> <p>19 cancellation is simple, you'd also want to</p> <p>20 look at whether consumers can find the</p> <p>21 cancellation flow. Correct?"</p> <p>22 And the witness says:</p> <p>23 "ANSWER: Right. The first thing is easy</p> <p>24 to find. Right.</p> <p>25 "QUESTION: Easy to find. So if it's not</p> <p style="text-align: right;">Page 26</p>	<p>1 A. Right.</p> <p>2 Q. For any of the flows you evaluated, did you</p> <p>3 attempt to determine the percentage of consumers who</p> <p>4 attempted to find the cancellation flow and who were</p> <p>5 able to find it?</p> <p>6 A. Okay. No, I did not.</p> <p>7 Q. Okay. Then if you look at --</p> <p>8 MR. AIJAZ: Just one second.</p> <p>9 (Discussion between the witness and counsel.)</p> <p>10 MR. HUMMEL: Do you want to put that on the</p> <p>11 record?</p> <p>12 MR. AIJAZ: No.</p> <p>13 BY MR. HUMMEL:</p> <p>14 Q. What did he just tell you?</p> <p>15 MR. AIJAZ: That's privileged.</p> <p>16 MR. HUMMEL: No, it's not. You just talked to</p> <p>17 a witness during a deposition. It's absolutely not</p> <p>18 privileged, and it's absolutely subject to discovery.</p> <p>19 What did he just tell you?</p> <p>20 MR. AIJAZ: I'll tell you what I said. I</p> <p>21 said --</p> <p>22 MR. HUMMEL: No, no. I want it from the</p> <p>23 witness. I don't want it from you.</p> <p>24 MR. AIJAZ: I said, "Make sure you understand</p> <p>25 the question before you answer." That's what I said.</p> <p style="text-align: right;">Page 28</p>
<p>1 easy to find, it's not simple."</p> <p>2 All right. My question is this:</p> <p>3 Did you ever evaluate or study the percentage</p> <p>4 of consumers who attempted to find the cancellation</p> <p>5 flow on Match.com and who were able to find it?</p> <p>6 A. I'm sorry, can you repeat it just so I make</p> <p>7 sure I have it?</p> <p>8 MR. HUMMEL: Could I have that read back,</p> <p>9 please?</p> <p>10 (Record read as follows:</p> <p>11 "QUESTION: All right. My question is this:</p> <p>12 Did you ever evaluate or study the percentage</p> <p>13 of consumers who attempted to find the</p> <p>14 cancellation flow on Match.com and who were</p> <p>15 able to find it?")</p> <p>16 THE WITNESS: No, I did not.</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q. Okay. For any of the flows you evaluated.</p> <p>19 Right?</p> <p>20 A. I'm sorry. In what -- did I -- can you repeat</p> <p>21 that?</p> <p>22 I want to make sure I'm following you</p> <p>23 precisely.</p> <p>24 Q. Sure. Sure.</p> <p>25 You evaluated three online cancellation flows?</p> <p style="text-align: right;">Page 27</p>	<p>1 BY MR. HUMMEL:</p> <p>2 Q. Is that what he told you?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. So I then asked the FTC on page 99,</p> <p>5 line 8:</p> <p>6 "QUESTION: How would you evaluate that,</p> <p>7 whether something is easy to find?"</p> <p>8 And the answer is:</p> <p>9 "ANSWER: I think it's an objective</p> <p>10 standard based on, you know, what a reasonable</p> <p>11 consumer's experience on the website would</p> <p>12 be."</p> <p>13 Do you see that?</p> <p>14 A. Uh-huh.</p> <p>15 Q. Did you study what a reasonable consumer's</p> <p>16 experience on the website actually would be?</p> <p>17 MR. AIJAZ: Objection. Vague.</p> <p>18 THE WITNESS: That's difficult to answer</p> <p>19 without, again, grasping precisely what you mean by</p> <p>20 "reasonable consumer."</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q. Do you have an understanding of what the</p> <p>23 reasonable consumer standard is?</p> <p>24 A. I don't recall off the top of my head.</p> <p>25 Q. Do you know what a performance standard is?</p> <p style="text-align: right;">Page 29</p>

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<p>1 A. I mean, maybe, but I'd rather hear you tell me 2 what it is.</p> <p>3 Q. Well, you're the -- you're the purported 4 expert in usability.</p> <p>5 From a usability standpoint --</p> <p>6 A. Okay.</p> <p>7 Q. -- what is a performance standard?</p> <p>8 A. I mean, I think that depends on what you're 9 measuring. I'm not -- again, I'm just not sure exactly 10 what you are --</p> <p>11 Q. Well, in this --</p> <p>12 A. -- alluding to.</p> <p>13 Q. -- in this case, you're measuring how many 14 consumers attempt to find the --</p> <p>15 A. Okay --</p> <p>16 Q. -- cancellation flow.</p> <p>17 A. Sure.</p> <p>18 Q. -- and how many --</p> <p>19 (The reporter requested that people not speak 20 at once.)</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q. In this case, the question to be evaluated is 23 whether consumers can find a cancellation flow, and a 24 performance standard would be how consumers actually 25 perform in attempting to find the flow.</p> <p style="text-align: right;">Page 30</p>	<p>1 that it -- I was not -- I did not understand the 2 origination of those numbers and how they were 3 analyzed.</p> <p>4 Q. Okay. Did you ask the FTC to provide you that 5 information?</p> <p>6 A. So it's my understanding that there has been 7 information provided at different points throughout 8 this whole process.</p> <p>9 I believe I asked questions about that back in 10 January, and I think -- I believe I was told that they 11 didn't have that data.</p> <p>12 But, again, I don't know precisely which piece 13 of the data you're talking about.</p> <p>14 But at any rate, it wasn't clear to me that 15 the FTC was given data that we could objectively say 16 measured these things in a way that I could crystally 17 clear say, "Yes, I understand this and could do 18 something with it."</p> <p>19 Q. All right. So let's look at, again, the FTC's 20 sworn testimony on page 99 of -- of the deposition, 21 lines 20 through 23.</p> <p>22 And this is, again, in connection with the 23 question of whether Match.com's cancellation process is 24 easy to find.</p> <p>25 And I asked him:</p> <p style="text-align: right;">Page 32</p>
<p>1 And I take it you didn't study that. Correct?</p> <p>2 MR. AIJAZ: Objection. Foundation.</p> <p>3 THE WITNESS: I'm sorry. I just wouldn't have 4 used that terminology, so I'm trying to parse exactly 5 what you mean.</p> <p>6 Did I study -- did I conduct a usability study 7 of the flow?</p> <p>8 BY MR. HUMMEL:</p> <p>9 Q. Yes.</p> <p>10 A. No. I did not conduct a usability study of 11 the flow with users.</p> <p>12 Q. And you didn't conduct a -- a performance 13 study; in other words, an assessment of data which 14 shows how many consumers attempted to find the flow and 15 how many actually found it.</p> <p>16 A. Okay. Now I --</p> <p>17 MR. AIJAZ: Objection. Vague and foundation.</p> <p>18 THE WITNESS: Now I understand what you mean.</p> <p>19 No, I did not.</p> <p>20 BY MR. HUMMEL:</p> <p>21 Q. Okay. And you have no critique that I can see 22 in your rebuttal report of Mr. Ward's use of the 23 company data relating to average time for completion 24 and effectiveness and completion rates. Correct?</p> <p>25 A. It's not that I didn't have a critique. It's</p> <p style="text-align: right;">Page 31</p>	<p>1 "QUESTION: You could do a study. Right? 2 You could ask a series of consumers, 'Hey, 3 look at this website. Where would you go to 4 find our subscription cancellation flow?'"</p> <p>5 I asked that question.</p> <p>6 And the FTC, under oath, said: 7 "ANSWER: Sure. You could do that. It's 8 possible."</p> <p>9 Why didn't you do that?</p> <p>10 A. That was outside the scope of what I agreed to 11 do on this case. They didn't ask me to conduct a 12 usability study.</p> <p>13 Q. That's my question. They didn't ask you to 14 conduct a usability study.</p> <p>15 Why? Do you know?</p> <p>16 A. No. I don't know.</p> <p>17 Q. Did you attempt a usability study in this 18 case?</p> <p>19 A. No, I did not.</p> <p>20 Q. So you didn't attempt a usability study, get 21 bad results, and then not put it in your report?</p> <p>22 A. No.</p> <p>23 Q. Okay. I'm correct, you didn't do that?</p> <p>24 A. Right. I did not do that.</p> <p>25 Q. Did you ask the FTC, "Hey, I really should do</p> <p style="text-align: right;">Page 33</p>

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<p>1 a usability study?"</p> <p>2 A. No, I did not.</p> <p>3 Q. Okay.</p> <p>4 Could you show me, please --</p> <p>5 This is a document that was marked by the FTC</p> <p>6 in their deposition of Brandon Ward.</p> <p>7 A. Brandon Ward? Yeah.</p> <p>8 Q. I'm sorry, I'll keep my voice up.</p> <p>9 Have you read the deposition of Brandon Ward?</p> <p>10 A. I skimmed a rough copy of it.</p> <p>11 Q. What does "skimmed" mean?</p> <p>12 A. It was provided to me yesterday or the day</p> <p>13 before; I think, maybe, two days before at most. So</p> <p>14 I ...</p> <p>15 MR. HUMMEL: Exhibit 3?</p> <p>16 (Discussion off the record.)</p> <p>17 (Deposition Exhibit 3 was marked for</p> <p>18 identification.)</p> <p>19 BY MR. HUMMEL:</p> <p>20 Q. Do you have in front of you a document</p> <p>21 entitled "How to Conduct a Heuristic Evaluation"?</p> <p>22 A. Yes, I do.</p> <p>23 Q. And this is published by the</p> <p>24 Nielsen Norman Group?</p> <p>25 A. Yes, it is.</p> <p style="text-align: right;">Page 34</p>	<p>1 A. This one is very new.</p> <p>2 Q. Have you seen this before?</p> <p>3 A. Let me take a moment to look at it.</p> <p>4 This is so new that I may not have seen it.</p> <p>5 That's right. June 25. And today is, what, July 27?</p> <p>6 No, I don't think I've seen this one. I'm</p> <p>7 familiar with the articles they cite at the</p> <p>8 beginning --</p> <p>9 Q. Sure.</p> <p>10 A. -- but I don't think I have seen this one.</p> <p>11 Q. Okay. The first sentence of the article</p> <p>12 reads:</p> <p>13 "A heuristic evaluation is a method for</p> <p>14 identifying design problems in a user</p> <p>15 interface."</p> <p>16 Do you see that?</p> <p>17 A. I do.</p> <p>18 Q. Do you agree that that is the definition of a</p> <p>19 heuristic evaluation?</p> <p>20 A. Yes, I do.</p> <p>21 Q. Okay. So doing a heuristic analysis does not</p> <p>22 answer the question of whether a process is simple or</p> <p>23 not; it simply identifies problems. Correct?</p> <p>24 MR. AIJAZ: Objection. Calls for a legal</p> <p>25 analysis. Outside the scope.</p> <p style="text-align: right;">Page 36</p>
<p>1 Q. And you considered them, I think you said, the</p> <p>2 authoritative guide to how to conduct a heuristic</p> <p>3 evaluation. Right?</p> <p>4 MR. AIJAZ: Objection. Misstates the</p> <p>5 testimony.</p> <p>6 THE WITNESS: An authoritative, yeah; not the</p> <p>7 only.</p> <p>8 BY MR. HUMMEL:</p> <p>9 Q. I understand.</p> <p>10 But if you look, please, the first sentence of</p> <p>11 this summary says:</p> <p>12 "Step-by-step instructions to</p> <p>13 systematically review your product to find</p> <p>14 potential usability and experience problems."</p> <p>15 Do you see that?</p> <p>16 A. Sorry. No, I don't.</p> <p>17 Wait.</p> <p>18 Q. Under "How to Conduct" --</p> <p>19 A. Yes. Yes. I see the subhead.</p> <p>20 Q. And then this is written by Kate Moran and</p> <p>21 Kelley Gordon.</p> <p>22 Do you see that?</p> <p>23 A. Yes, I do.</p> <p>24 Q. On June 25, 2023.</p> <p>25 So it's timely. Right?</p> <p style="text-align: right;">Page 35</p>	<p>1 THE WITNESS: It's a method for identifying</p> <p>2 design problems, but it is up to the expertise of the</p> <p>3 evaluator to apply that method and use their training</p> <p>4 as a basis for explaining what those problems mean.</p> <p>5 BY MR. HUMMEL:</p> <p>6 Q. And then you see a heading that says:</p> <p>7 "When to Conduct an Heuristic Evaluation."</p> <p>8 Do you see that?</p> <p>9 A. Yes.</p> <p>10 Q. First sentence there reads:</p> <p>11 "Heuristic evaluations are useful for</p> <p>12 identifying glaring problems in an interface."</p> <p>13 Do you see that?</p> <p>14 A. I do.</p> <p>15 Q. All right. And then there's a sentence --</p> <p>16 there's a next paragraph which reads:</p> <p>17 "Heuristic evaluations are useful for</p> <p>18 stretching a limited UX research budget."</p> <p>19 Do you see that?</p> <p>20 A. Yes.</p> <p>21 Q. Did the FTC place any limits on the amount you</p> <p>22 could spend in conducting your analysis to answer the</p> <p>23 questions they posed?</p> <p>24 A. I mean, there was certainly a budget for the</p> <p>25 contract. I did not have unlimited funds.</p> <p style="text-align: right;">Page 37</p>



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<p>1 Q. Did you say, "I can't evaluate your questions 2 based on the budget you've given me"? 3 A. No, I did not. 4 Q. All right. Now, if you could just read into 5 the record the next sentence -- the first sentence of 6 the next paragraph. 7 MR. AIJAZ: Chad, is there -- if you want to 8 read it, you can do that. 9 MR. HUMMEL: She can read it. 10 MR. AIJAZ: Yeah. You can read it as well. 11 BY MR. HUMMEL: 12 Q. Would you please read it? 13 MR. AIJAZ: Chad, if you want to read it into 14 the record, you can do it. 15 MR. HUMMEL: That's not an objection. 16 Q. Can you read it, please? 17 MR. AIJAZ: Yeah, Chad. If you want it in the 18 record, you can read it. 19 BY MR. HUMMEL: 20 Q. Are you able to read it? 21 A. I can read the words. I see them. 22 Q. Can you read them into the record, please? 23 MR. AIJAZ: You can go ahead and read it. 24 THE WITNESS: (Reading): 25 "However, heuristic evaluations cannot</p> <p style="text-align: right;">Page 38</p>	<p>1 A. Yes. 2 MR. AIJAZ: Objection. Misstates the 3 document. 4 BY MR. HUMMEL: 5 Q. It says: 6 "To design good experiences, comma, you'll 7 still need to test with actual users." 8 Do you see that? 9 A. I see that. 10 Q. All right. Now, just to be clear, you tested 11 none of Match's website and cancellation flow with 12 actual users. Correct? 13 MR. AIJAZ: Objection. Asked and answered 14 multiple times. 15 THE WITNESS: No, I did not test with -- with 16 users. 17 BY MR. HUMMEL: 18 Q. Mr. Ward did. Correct? 19 He did perform a usability analysis. Correct? 20 A. He performed a usability analysis but not 21 necessarily with Match's representative demographic. 22 Q. How many usability studies have you conducted 23 in your career? 24 A. I mean, that's a hard number to track. I want 25 to say dozens, but I don't think I could give you a</p> <p style="text-align: right;">Page 40</p>
<p>1 replace user research." 2 BY MR. HUMMEL: 3 Q. Period. Right? 4 A. Period. Yes. 5 Q. That's by the authoritative source for how to 6 conduct heuristic evaluations. Correct? 7 MR. AIJAZ: Objection. Misstates testimony. 8 THE WITNESS: No, actually it's by Kate Moran 9 and Kelley Gordon, who I am not familiar with at all. 10 BY MR. HUMMEL: 11 Q. Published by whom? 12 A. I mean, it is published by the Nielsen Norman 13 Group, but I don't know those two researchers. 14 Q. Okay. Then the next sentence reads: 15 "User-experience design is highly 16 contextual." 17 Do you see that? 18 A. I do. 19 Q. All right. Do you agree that UX design is 20 highly contextual? 21 A. Yes, I do. 22 Q. And it says (as read): 23 "To design good experiences, you'll need 24 to test with actual users." 25 Correct?</p> <p style="text-align: right;">Page 39</p>	<p>1 precise number. I'd have to sit here and do a lot of 2 counting. 3 Q. But your best estimate here is dozens? 4 A. I would say at least 30. 5 Q. 30. 6 Did you tell the FTC that you had done at 7 least 30 usability studies? 8 A. I don't -- 9 MR. AIJAZ: Objection. You're asking for 10 privileged communications. 11 BY MR. HUMMEL: 12 Q. I'm attempting to probe the scope of the 13 assignment and why in the world the FTC would not ask 14 you, somebody who's conducted 30 usability studies in 15 your career, not to do one. 16 Can you answer that question? 17 MR. AIJAZ: There's no -- I don't know that 18 there's a question. 19 Can you rephrase? 20 MR. HUMMEL: There is. 21 Q. Why did the FTC not ask you to conduct a 22 usability study in this case? 23 MR. AIJAZ: Objection. Calls for speculation. 24 THE WITNESS: No, I -- yeah, I don't know 25 precisely why they didn't ask me to do that.</p> <p style="text-align: right;">Page 41</p>

<p>1 BY MR. HUMMEL:</p> <p>2 Q. Did you tell the FTC, "Hey, in order for any</p> <p>3 conclusions I give you based on a heuristic analysis to</p> <p>4 be valid or reliable, I need to test them with a</p> <p>5 usability study"?</p> <p>6 MR. AIJAZ: Chad, objection. That calls for</p> <p>7 protected information.</p> <p>8 The rule is very clear on what you can ask</p> <p>9 about with respect to communications. This is far</p> <p>10 outside of what's allowable.</p> <p>11 So don't answer.</p> <p>12 MR. HUMMEL: You're instructing her not to</p> <p>13 answer?</p> <p>14 MR. AIJAZ: Yeah, because, you know, it's not</p> <p>15 allowed what you're asking for. 26(b)(4) if you want</p> <p>16 it.</p> <p>17 MR. HUMMEL: Well, what she did and didn't do</p> <p>18 is highly probative of whether what she did is reliable</p> <p>19 or not.</p> <p>20 MR. AIJAZ: I agree. What she did. But not</p> <p>21 communications.</p> <p>22 MR. HUMMEL: Look. If the FTC wants to --</p> <p>23 Q. Would you be comfortable in a situation</p> <p>24 whereby the Federal Trade Commission, which is formed</p> <p>25 in part to enforce consumer protection laws including</p> <p style="text-align: right;">Page 42</p>	<p>1 reporter to mark as Exhibit 4 a document entitled</p> <p>2 "Nielsen Norman Group Heuristic Evaluation Workbook."</p> <p>3 MR. AIJAZ: Do you want to take a break while</p> <p>4 you're looking for it?</p> <p>5 MR. HUMMEL: Sure. We can go off the record.</p> <p>6 (Recess from 9:40 A.M. to 9:51 A.M.)</p> <p>7 (Deposition Exhibit 4 was marked for</p> <p>8 identification.)</p> <p>9 BY MR. HUMMEL:</p> <p>10 Q. Ms. King, you understand you're still under</p> <p>11 oath?</p> <p>12 A. I do.</p> <p>13 Q. Any reason you can't continue to give your</p> <p>14 best truthful testimony here this morning?</p> <p>15 A. Nope.</p> <p>16 Q. Okay. I have marked as Exhibit Number 4 a</p> <p>17 document also published by the Nielsen Norman Group</p> <p>18 called a "Heuristic Evaluation Workbook."</p> <p>19 Do you see that?</p> <p>20 A. I do see it.</p> <p>21 Q. Did you utilize this workbook in connection</p> <p>22 with your heuristic evaluation?</p> <p>23 A. I did not.</p> <p>24 Q. Did the two individuals that also did or</p> <p>25 assisted you in your evaluation use this workbook, to</p> <p style="text-align: right;">Page 44</p>
<p>1 ROSCA, told you to do an assignment that you couldn't</p> <p>2 validate based on some test that you could -- according</p> <p>3 to the FTC, that could be done?</p> <p>4 MR. AIJAZ: Objection. Form. This is an</p> <p>5 incomplete hypothetical. And it's vague.</p> <p>6 But you can answer.</p> <p>7 THE WITNESS: So I think that you are reading</p> <p>8 this article extremely literally.</p> <p>9 And if you look back at the citing research</p> <p>10 into what -- how you develop heuristic evaluations,</p> <p>11 what you would find is that what -- how the Nielsen</p> <p>12 Norman Group frames this discussion is very much</p> <p>13 focused toward a set of practitioners.</p> <p>14 But, fundamentally, what underlies it is a</p> <p>15 method; a method that was developed that you can apply</p> <p>16 in a variety of different contexts.</p> <p>17 And the way that Nielsen has developed this</p> <p>18 method has been mostly -- I wouldn't -- "commercialize"</p> <p>19 is maybe not the right word, but he's tried to make it</p> <p>20 accessible and put it within a particular context.</p> <p>21 But if you look at the academic literature on</p> <p>22 this topic, you don't necessarily have to follow what</p> <p>23 this article says line by line in order to conduct a</p> <p>24 heuristic evaluation.</p> <p>25 MR. HUMMEL: I'm going to ask the court</p> <p style="text-align: right;">Page 43</p>	<p>1 your knowledge?</p> <p>2 A. I do not believe they did.</p> <p>3 Q. Now, you said you've conducted 30 usability</p> <p>4 studies in your career, or at least 30. Right?</p> <p>5 A. Approximately.</p> <p>6 Q. That's a best estimate.</p> <p>7 So back to the transcript of Mr. Bandy,</p> <p>8 page 99, line 20, where I asked him:</p> <p>9 "QUESTION: You could do a study. Right?"</p> <p>10 And he says:</p> <p>11 "ANSWER: Sure. You could do that. It's</p> <p>12 possible."</p> <p>13 Right?</p> <p>14 Have you thought about how you would design a</p> <p>15 study that would evaluate whether consumers who are</p> <p>16 attempting to cancel on the Match.com website -- any of</p> <p>17 the versions you examined -- how you would design a</p> <p>18 study that would examine whether a reasonable consumer</p> <p>19 could find a cancellation flow?</p> <p>20 MR. AIJAZ: Objection. Form. And vague.</p> <p>21 THE WITNESS: I mean, I have some general</p> <p>22 ideas, but I did not spend much time thinking that</p> <p>23 through.</p> <p>24 BY MR. HUMMEL:</p> <p>25 Q. What are those general ideas, if you can?</p> <p style="text-align: right;">Page 45</p>

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<p>1 A. Well, I mean, the -- the challenge, of course, 2 is recreating the website. 3 So if you are going to study 2016, 2018, 4 and -- sorry, 2022, then, you know, there are a number 5 of different ways you could approach it. But, you 6 know, the -- the first starting point is how you 7 recreate some approximation of the website and provide 8 a -- I would say, like, a native task for people to 9 engage with. 10 Now, that's all possible. You don't even have 11 to make a fully functional prototype of the website to 12 do that. But that -- if you did that -- I mean, again, 13 that's one way you could do it. 14 You know, you could in some cases, although 15 maybe not as ideal, use, you know, paper prototyping to 16 take somebody through a similar type of task. 17 But overall, the goal in doing so is to 18 conduct a study that is reliable and that is not overly 19 directive, meaning that you want to situate a task 20 within somebody's -- to the best that you can, 21 somebody's natural experience with the website. 22 So if you put the website in front of them and 23 say, "Go cancel," that's a very directed task. And 24 that potentially influences the outcome in the sense 25 that if you direct them to cancel, they are going to</p> <p style="text-align: right;">Page 46</p>	<p>1 BY MR. HUMMEL: 2 Q. What was your budget given to you by the FTC 3 to perform this analysis that ultimately resulted in 4 your first report? 5 A. I believe the first phase was around \$40,000. 6 Q. And how much have you been paid to date for 7 your opinions? 8 MR. AIJAZ: Objection. I didn't like the form 9 of that, but go ahead and answer. 10 THE WITNESS: You mean per hour or total 11 billing -- 12 BY MR. HUMMEL: 13 Q. Total. 14 A. -- up until now? 15 I am not sure. I want to say that we're at -- 16 and this includes my assistants. I don't have my rate 17 pulled out separately. I think we've billed in the 18 order of \$75,000. But, again, not 100 percent sure. 19 MR. AIJAZ: Let me just get a cleaner 20 objection. 21 She was not paid for her opinion, so that 22 misstates -- there's a lack of foundation there. She 23 was paid for her report. 24 MR. HUMMEL: Well, that's testimony and 25 speaking objection and completely improper.</p> <p style="text-align: right;">Page 48</p>
<p>1 probably do everything they can to cancel because you 2 are paying them for their time in order to do that. 3 So the challenge is to work in a task in a way 4 that doesn't encourage them to modify their use and is 5 as naturalistic as possible. 6 Q. Sure. My question was actually simpler, which 7 is: 8 How could you test whether a consumer could 9 find the cancellation flow? 10 A. Well, again, I mean, I think it's dependent on 11 how you would -- how you would kind of construct the -- 12 the site in order to actually run such a study. 13 Q. Could -- I mean, could you imagine how you 14 would design a study where you would test whether it's 15 easy for a consumer to -- well, to -- whether it's easy 16 to find the cancellation process? 17 MR. AIJAZ: Objection. Scope and calls for 18 speculation. 19 THE WITNESS: It's possible. And I will say 20 that, you know, as I am talking -- as I am talking 21 through this, I am thinking mostly about testing those 22 older versions. You know, there is a difference 23 between doing that and testing the live website, for 24 example. That's a different potential tactic. 25</p> <p style="text-align: right;">Page 47</p>	<p>1 MR. AIJAZ: It was a bad question. 2 MR. HUMMEL: It's a really bad objection, and 3 it's improper and might be sanctionable. 4 Q. So let's look at -- 5 MR. AIJAZ: No. 6 MR. HUMMEL: You can't testify. 7 Q. So let's go on. 8 On page 101, I asked the FTC a question at 9 line 14. 10 "QUESTION: Is one factor in assessing 11 whether a cancellation flow is simple or not 12 its effectiveness?" 13 I go on: 14 "In other words, the percentage of 15 consumers who attempt to cancel using a flow 16 and succeed, could that be relevant?" 17 "ANSWER: Sure." 18 In connection with any of the flows that you 19 evaluated in this case to answer the FTC's two 20 inquiries, did you measure the effectiveness of the 21 flow? 22 MR. AIJAZ: Objection. Vague. 23 BY MR. HUMMEL: 24 Q. As defined in this question? 25 A. Okay. So you're defining "effectiveness" as</p> <p style="text-align: right;">Page 49</p>

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<p>1 the percentage of consumers who attempt to cancel using 2 a flow and succeed. Is that correct? 3 Q. Exactly. 4 A. Okay. Let me consider that for a moment. 5 I'm sorry. So now take me back to the first 6 question, which was, did I -- 7 Q. Measure effectiveness. 8 A. Okay. Did I measure effectiveness by looking 9 at consumer behavior, whether in a usability test or 10 other -- 11 Q. Performance test. Right. 12 A. No, I did not. 13 Q. Is there a reason why? 14 A. Again, that was not -- outside the scope of 15 the work that I agreed to do. 16 Q. Well, Mr. Ward's report cited company data on 17 effectiveness, and you had no rebuttal to that data. 18 Do you have any opinions about that data, as 19 you sit here today, that you intend to express at trial 20 that are not contained in either report? 21 MR. AIJAZ: Objection. Foundation. 22 THE WITNESS: I would need to look at 23 precisely what data we're talking about. 24 BY MR. HUMMEL: 25 Q. The effectiveness data; the percentage of</p> <p style="text-align: right;">Page 50</p>	<p>1 reading "effectiveness" again. 2 Yes. That is possible. 3 BY MR. HUMMEL: 4 Q. And you didn't do it. 5 A. I did not do that. 6 Q. So just to wrap this up, you didn't look at 7 effectiveness, you didn't look at average time to 8 completion; you didn't look at maximum or minimum times 9 that it takes for a consumer to cancel on the Match.com 10 flows that you studied; you didn't do any sort of 11 evaluation of whether a consumer -- any sort of study 12 to determine whether consumers, in fact, can find the 13 flow. 14 Is that all correct? 15 MR. AIJAZ: Objection. Vague. Form. And 16 misstates testimony. 17 THE WITNESS: Can we go through them one by 18 one so I can answer? 19 BY MR. HUMMEL: 20 Q. Yeah. So you didn't attempt to measure 21 effectiveness as defined in this question on page 101 22 of the FTC's deposition testimony. 23 A. You know, I did not attempt to do that using a 24 user study. True. 25 Q. By the way, in terms of the -- a question of</p> <p style="text-align: right;">Page 52</p>
<p>1 consumers who attempted to cancel -- entered the flow 2 intending to cancel and effectively did so. 3 A. Okay. Can you point me to his report so we 4 can discuss precisely those numbers? 5 I mean, I think I know what you're talking 6 about, but -- 7 Q. I'm not going to do that now. 8 A. Okay. 9 Q. My question is: Do you have -- as you sit 10 here today, is there any opinion about that company 11 data that you intend to offer at trial that is not 12 contained in your two report? 13 MR. AIJAZ: Objection. She answered the 14 question, and she said what she would need to do to 15 answer it. 16 THE WITNESS: I mean, I have some thoughts 17 related to how it was presented in his report, but I 18 have not independently looked at that data because, 19 again, I'm not even sure it was available to me at the 20 time I was doing either report. 21 BY MR. HUMMEL: 22 Q. You could attempt to measure effectiveness by 23 doing a usability study. Correct? 24 MR. AIJAZ: Objection. Calls for speculation. 25 THE WITNESS: Sorry. I'm making sure -- I'm</p> <p style="text-align: right;">Page 51</p>	<p>1 whether Match.com's cancellation flow is easy to use, 2 what would you consider to be an appropriate 3 effectiveness percentage? 4 MR. AIJAZ: Objection. Vague. 5 THE WITNESS: I'm sorry. So are you asking me 6 what percentage of consumers who are subscribed, what 7 is an effective cancellation rate? 8 BY MR. HUMMEL: 9 Q. Yeah. 10 A. Ideally, 100 percent. 11 Q. Okay. 12 A. If I have subscribed to a service and I do not 13 wish to be subscribed anymore, I should be able to 14 unsubscribe. Full stop. 15 Q. Sure. 16 And in this case, in Match, if you weren't 17 able to do the online flow, you could call customer 18 service. Right? 19 A. I believe so. But I have not seen precisely 20 how individuals locate that phone number, meaning I 21 don't know where it was offered. 22 So I don't have a -- I'm sorry, did you -- 23 MR. AIJAZ: No, no. I'll wait. 24 THE WITNESS: Okay. So I will say, in theory, 25 yes, but it is dependent on how accessible that phone</p> <p style="text-align: right;">Page 53</p>

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<p>1 number was. 2 BY MR. HUMMEL: 3 Q. Sure. 4 MR. AIJAZ: Objection. Foundation to the 5 question. 6 BY MR. HUMMEL: 7 Q. And you haven't offered any opinions with 8 whether or not that phone number is easily accessible. 9 Correct? 10 MR. AIJAZ: Objection. Form. 11 THE WITNESS: I would need to go back to my 12 report because I believe I talk about it -- I may talk 13 about it in relation to looking at some of the FAQs. 14 So I'm -- I can't say definitively off the top of my 15 head right now. 16 BY MR. HUMMEL: 17 Q. Let me ask it a better way. 18 Do you have an opinion as you sit here today 19 that you're willing to offer under penalty of perjury 20 as to whether the phone number to contact customer 21 service is easily accessible to consumers on the 22 Match.com website? 23 A. I have concerns about it. But I don't -- I 24 did not study specifically all of the different places 25 where one could access the phone number.</p> <p style="text-align: right;">Page 54</p>	<p>1 it's easy to cancel by text message. 2 MR. AIJAZ: Objection. Foundation. 3 THE WITNESS: I wasn't sure if that was 4 possible; but, no. 5 BY MR. HUMMEL: 6 Q. How about chat function? 7 A. I don't know if Match had a chat function for 8 the scope of time during which I looked at the 9 report -- 10 Q. Either way -- 11 A. I mean, looked at the site. 12 Q. -- you have no opinion. Correct? 13 A. Right. 14 Q. So your sole focus was the online cancellation 15 flow for the Match.com website. Correct? 16 A. In terms of evaluation, yes. 17 Q. And you have no opinions about mobile app 18 cancellation processes. Right? 19 A. That is correct. I was not asked to look at 20 the mobile flows. 21 Q. Now, if you look at -- just to finish up on 22 the FTC's sworn testimony here on page 100. 23 So I ask a question that starts on line 13: 24 "QUESTION: Well, in the Match.com 25 cancellation flow, I think you described the</p> <p style="text-align: right;">Page 56</p>
<p>1 Q. Do you have an opinion about whether or not it 2 is easy for a Match.com subscriber to cancel by phone? 3 MR. AIJAZ: Objection. Scope. 4 MR. HUMMEL: Right. I'm trying to determine 5 the scope. 6 I don't want her to get up on the stand and 7 testify at trial, in other words, Counsel, "Hey, I've 8 looked at the phone cancellation process now, and it's 9 not easy or simple." 10 Q. You have no opinion about the phone 11 cancellation process. Correct? 12 A. If by "process" you mean, you know, calling 13 and the actual process somebody goes through when 14 they're talking to the agent or how simple or easy that 15 is, no, I have no insight into that piece of it. 16 Q. And no opinions about wait times on the 17 phone -- 18 A. Right. None. 19 (The reporter requested that people not speak 20 at once.) 21 BY MR. HUMMEL: 22 Q. And you have no opinions about whether or not 23 it's easy to cancel by email. Correct? 24 A. No. I do not. 25 Q. And you have no opinions about whether or not</p> <p style="text-align: right;">Page 55</p>	<p>1 steps that would be taken: You first have to 2 click on the gear, then you click on 'Manage 3 Subscription.' 4 "Does the FTC contend that those links are 5 not clear? 6 "ANSWER: I think that's more about 7 difficulty in finding the cancellation flow. 8 I think you'd use the term 'clear verbiage,' 9 'clear wording,' and that when I said that, I 10 was more referring to the things like 'before 11 you go' language and after, you know, 'cancel 12 subscription link.' That's not clear. When 13 the 'Continue' button was on the 'Save' offer, 14 that's not clear." 15 Do you see that? 16 A. I do see that. 17 Q. Did you do any empirical study of how users 18 actually react to the "before you go" language? 19 A. Such as a copy test, for example? 20 Q. Yes. 21 A. No, I did not. 22 Q. Did you do any sort of empirical study or copy 23 test about how consumers receive the subscription link? 24 A. No, I did not. 25 Q. Did you do any copy test or empirical analysis</p> <p style="text-align: right;">Page 57</p>



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<p>1 about how consumers perceive and act upon "Continue"</p> <p>2 buttons on the flow?</p> <p>3 MR. AIJAZ: Objection. Vague.</p> <p>4 THE WITNESS: No, not specifically.</p> <p>5 BY MR. HUMMEL:</p> <p>6 Q. I just want to be clear.</p> <p>7 You -- when you talked about effectiveness</p> <p>8 rate before, you said ideally, it would be</p> <p>9 "100 percent. Full stop." Is that right?</p> <p>10 A. Yeah.</p> <p>11 Q. Now, are you saying that anything less than</p> <p>12 100 percent violates ROSCA?</p> <p>13 MR. AIJAZ: Objection. Misstates the</p> <p>14 testimony and calls for legal analysis.</p> <p>15 BY MR. HUMMEL:</p> <p>16 Q. Let me say it another way:</p> <p>17 Are you saying that anything less than</p> <p>18 100 percent in a usability study would make something</p> <p>19 not easy to use?</p> <p>20 A. No. That's not what I'm saying.</p> <p>21 Q. All right. I just want to be clear.</p> <p>22 So it's your -- it's the goal that it would be</p> <p>23 100 percent --</p> <p>24 A. Right.</p> <p>25 Q. -- but you're not opining that something less</p> <p style="text-align: right;">Page 58</p>	<p>1 So that's sort of a 90 percent, and you do</p> <p>2 that using controls, et cetera, to eliminate the noise.</p> <p>3 You know that. You've done consumer surveys.</p> <p>4 Right?</p> <p>5 Correct?</p> <p>6 MR. AIJAZ: Objection. Form.</p> <p>7 BY MR. HUMMEL:</p> <p>8 Q. That's why you have a control.</p> <p>9 MR. AIJAZ: Objection. Form and foundation.</p> <p>10 THE WITNESS: I've done consumer surveys. If</p> <p>11 you're asking about an experimental survey with a</p> <p>12 control group, I'm not quite following how that leads</p> <p>13 to your 10 percent yet, but please continue.</p> <p>14 BY MR. HUMMEL:</p> <p>15 Q. Did you do a consumer survey in the</p> <p>16 Commerce Planet case?</p> <p>17 A. It was a long time ago.</p> <p>18 No, I did not.</p> <p>19 Q. Your opinion was, basically, that material</p> <p>20 terms were presented below the fold on a website.</p> <p>21 Right?</p> <p>22 That was kind of --</p> <p>23 A. Yeah, I think that's an okay summary of that.</p> <p>24 Q. And the judge ultimately, in calculating</p> <p>25 restitution amounts, said, "I'm going to assume</p> <p style="text-align: right;">Page 60</p>
<p>1 than 100 percent might still be simple.</p> <p>2 MR. AIJAZ: Objection. Form.</p> <p>3 THE WITNESS: I'm just trying to make sure I'm</p> <p>4 parsing your question correctly.</p> <p>5 BY MR. HUMMEL:</p> <p>6 Q. Me too. Let's rephrase it.</p> <p>7 It's not your testimony, Ms. King, that</p> <p>8 something less than 100 percent could not also be</p> <p>9 simple.</p> <p>10 A. I'm sorry, I'm just trying to take that in.</p> <p>11 What I am saying is that the goal -- if a</p> <p>12 consumer wants to cancel a subscription, they should be</p> <p>13 able to cancel it. Full stop.</p> <p>14 Ideally, you would have a cancellation flow</p> <p>15 that would allow that as -- at as high of an</p> <p>16 effective -- effectiveness rate, sorry, as possible.</p> <p>17 That would be the goal.</p> <p>18 Q. Do you have any opinions about -- well, strike</p> <p>19 that.</p> <p>20 Let me ask you this: There's an old maxim --</p> <p>21 strike that.</p> <p>22 There's an old maxim in marketing consumer</p> <p>23 perception research that 10 percent of people in the</p> <p>24 world, when asked "Is Chad holding up a pen right now?"</p> <p>25 would say no because they just get it wrong. Right?</p> <p style="text-align: right;">Page 59</p>	<p>1 50 percent of the people didn't read below the fold, so</p> <p>2 I'm going to cut the FTC's restitution demand in half."</p> <p>3 Do you remember that?</p> <p>4 MR. AIJAZ: Objection. Calls for a legal</p> <p>5 analysis.</p> <p>6 THE WITNESS: I was not involved in the case</p> <p>7 at that point.</p> <p>8 BY MR. HUMMEL:</p> <p>9 Q. Okay. Your testimony was limited to whether</p> <p>10 consumers would reasonably perceive disclaimers that</p> <p>11 were below the fold; that this is the package they were</p> <p>12 actually buying as opposed to what was advertised on</p> <p>13 top.</p> <p>14 Do you remember that?</p> <p>15 A. Like I said, it's been a while.</p> <p>16 MR. AIJAZ: Objection. Form.</p> <p>17 THE WITNESS: I mean, the -- it wasn't just</p> <p>18 the disclaimers, though, if I'm remembering correctly.</p> <p>19 It was also that there were, I think, preselected check</p> <p>20 boxes that were enrolling them in a negative option</p> <p>21 continuity plan.</p> <p>22 BY MR. HUMMEL:</p> <p>23 Q. Without a disclosure of what they were</p> <p>24 actually buying up front. Right?</p> <p>25 A. Correct.</p> <p style="text-align: right;">Page 61</p>

<p>1 Q. Yeah. Okay.</p> <p>2 And in that case, you didn't do a usability</p> <p>3 study -- or a consumer perception study.</p> <p>4 A. I didn't. I can't remember if somebody else</p> <p>5 did. It's just been too long.</p> <p>6 Q. Okay. Have you ever been qualified as an</p> <p>7 expert in the field of consumer perception?</p> <p>8 A. I don't believe I've been specifically offered</p> <p>9 in that context.</p> <p>10 Q. Have you ever been qualified as an expert in</p> <p>11 survey design?</p> <p>12 A. I have expertise in survey design, but I don't</p> <p>13 believe I've ever been offered up to the court as a</p> <p>14 survey expert. It's generally been within the capacity</p> <p>15 of human-computer interaction which, of course, survey</p> <p>16 analysis is one of our methods.</p> <p>17 Q. And human-consumer interaction is --</p> <p>18 A. Human-computer interaction. Sorry.</p> <p>19 Q. Human-computer interaction is often referred</p> <p>20 to as "HCI."</p> <p>21 A. Yes.</p> <p>22 Q. And you consider yourself an expert in HCI.</p> <p>23 A. Yes.</p> <p>24 Q. Okay. How many times have you been qualified</p> <p>25 to testify in court as an expert?</p> <p style="text-align: right;">Page 62</p>	<p>1 A. Technology developed for the public interest.</p> <p>2 Can be thinking -- you can -- can be for</p> <p>3 government, but more that it's independent of private</p> <p>4 influence.</p> <p>5 Q. Can you tell me how you came to be retained in</p> <p>6 this case?</p> <p>7 A. The FTC --</p> <p>8 MR. AIJAZ: Objection. Vague.</p> <p>9 THE WITNESS: The FTC called me.</p> <p>10 BY MR. HUMMEL:</p> <p>11 Q. Do you recall who called you?</p> <p>12 THE WITNESS: It might have been you. I can't</p> <p>13 remember.</p> <p>14 MR. AIJAZ: You might want to clarify.</p> <p>15 THE WITNESS: I realize I haven't actually</p> <p>16 said your last name out loud, so I'm struggling with</p> <p>17 it.</p> <p>18 MR. AIJAZ: Aijaz.</p> <p>19 THE WITNESS: Mr. Aijaz may have been the one</p> <p>20 that called me.</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q. Do you recall that he called you?</p> <p>23 A. I know I spoke with him on the phone. I know</p> <p>24 he was the one -- Mr. Tepfer -- Tepfler.</p> <p>25 Q. Reid Tepfer.</p> <p style="text-align: right;">Page 64</p>
<p>1 A. I have only testified in one case. Everything</p> <p>2 else I've worked on has settled.</p> <p>3 Q. And that was Commerce Planet?</p> <p>4 A. Yes.</p> <p>5 Q. And you've never been retained or offered</p> <p>6 testimony on behalf of a private party; only</p> <p>7 government. Right?</p> <p>8 A. I have been retained by a class action firm,</p> <p>9 just to make sure I'm understanding you correctly.</p> <p>10 Q. No, that's fair. That's a fair clarification.</p> <p>11 But you don't provide consulting or advice for</p> <p>12 private companies. Is that correct?</p> <p>13 A. No. Generally due to conflict of interest</p> <p>14 with my role at Stanford.</p> <p>15 Q. Are what does that mean, with your role at</p> <p>16 Stanford?</p> <p>17 A. Yes. My full-time job.</p> <p>18 Q. No, I -- I understand that.</p> <p>19 My question is: Why does your role at</p> <p>20 Stanford present a conflict for you consulting with or</p> <p>21 providing advice to private companies, including</p> <p>22 startups?</p> <p>23 A. Because most of my work in that space is</p> <p>24 focused on public interest technology.</p> <p>25 Q. What does "public interest technology" mean?</p> <p style="text-align: right;">Page 63</p>	<p>1 A. Yes. Sorry. I put an extra L in there.</p> <p>2 Q. It might have been the two of them?</p> <p>3 A. It probably was the two of them --</p> <p>4 Q. And in that --</p> <p>5 A. -- one of the two.</p> <p>6 Q. And in that initial call, did they convey to</p> <p>7 you the assignment they were interested in having you</p> <p>8 pursue?</p> <p>9 A. So, I mean, we spoke at different points in</p> <p>10 time as often happens. You know, there's usually an</p> <p>11 introductory call that brings up kind of the bare facts</p> <p>12 of the case, and then there's often a follow-up call.</p> <p>13 I don't know -- I can't recall what happened</p> <p>14 when.</p> <p>15 Q. Do you recall who ultimately gave you the</p> <p>16 assignment?</p> <p>17 A. I believe both of them.</p> <p>18 Q. And the assignment is as set forth in -- on</p> <p>19 page 3 of your expert report?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. And did you then develop your own</p> <p>22 methodology on how you would assess answering the</p> <p>23 questions that they presented as your assignment?</p> <p>24 A. So I have conducted multiple heuristic</p> <p>25 evaluations over my career, and I follow a specific</p> <p style="text-align: right;">Page 65</p>

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<p>1 as a function of those who attempted to cancel.  2 MR. AIJAZ: Objection. Vague.  3 THE WITNESS: I do not discuss the percentage  4 of consumers. No, I don't.  5 BY MR. HUMMEL:  6 Q. Look at your table of contents on page 2 of  7 your initial report, Exhibit 1.  8 A. Okay.  9 Q. So you describe in your table of contents the  10 "Overview of Method."  11 Do you see that?  12 A. Uh-huh.  13 Q. Is that yes?  14 A. Yes. Sorry. Yeah.  15 Q. The court -- if we were on video, we could  16 read that, but the court reporter has to take down a  17 yes or a no.  18 So -- and the overview of the method is in  19 your initial report an introduction to human/computer  20 interaction.  21 That's your field of expertise. Correct?  22 A. Yes, it is.  23 Q. And then you -- the two methods you cite are  24 heuristic analysis and "dark" design patterns. Right?  25 A. That's what the table of contents says.</p> <p style="text-align: right;">Page 70</p>	<p>1 found was evidence that Match.com employees were  2 aware -- and I'll read this -- "that the cancellation  3 process is problematic," and --  4 Q. You go on to say, quote:  5 "With one," O-N-E, "employee noting in  6 2016 that 'Honestly, it's been the same  7 complaint for the past decade that I've been  8 with Match. It takes up to seven or eight  9 clicks to complete the flow or turn off AR" --  10 "AR" is auto renew -- "even if you can figure  11 out how to do it. Also, the majority of  12 members drop out when asked to re-enter their  13 password."  14 Do you see that?  15 A. I do.  16 MR. AIJAZ: Chad, I'm not sure if she had  17 finished answering your previous question.  18 MR. HUMMEL: Okay.  19 MR. AIJAZ: Were you done?  20 THE WITNESS: Sure.  21 BY MR. HUMMEL:  22 Q. So -- and that was in 2016, which was at the  23 time of one of the first flows -- of the first flow you  24 reviewed. Correct?  25 A. 2016.</p> <p style="text-align: right;">Page 72</p>
<p>1 Q. Okay. And those are the two analyses that I  2 understood you undertook for purposes of your initial  3 report.  4 Is there anything else that you can point to  5 in your report that you did to answer the FTC's two  6 questions that they posed on page 3?  7 A. So the initial -- I'm sorry.  8 In the initial report on page 8, I describe  9 the research process, which is that for -- one, I  10 reviewed the amended complaint; two, I reviewed the  11 screen captures and screenshots for cancellation flow,  12 the public-facing FAQs, and other screen captures from  13 Match.com, performed the heuristic analysis, and  14 performed conclusions regarding questions of consumer  15 confusion, and then, finally, I reviewed the internal  16 company documents that discuss the cancellation flow.  17 Q. What conclusions did you reach based on  18 reviewing the internal company documents discussing the  19 cancellation flow?  20 A. I'll go back to that section.  21 So I'm looking -- starting on page 59 of my  22 report.  23 Q. Okay.  24 A. And I'm just rereviewing what I wrote here.  25 So when I reviewed these documents, what I</p> <p style="text-align: right;">Page 71</p>	<p>1 Q. Okay.  2 A. Yeah.  3 Q. Did you look at documents where company  4 employees or -- yeah, company employees offered  5 suggestions on how the flow might be improved?  6 A. Yes. From -- there were, I think, multiple.  7 It's going to be difficult to necessarily pull them all  8 from memory.  9 I know there was at least one PowerPoint  10 presentation that suggested a redesign of that process.  11 Q. Called "Broken Windows"?  12 A. I believe I have seen a version of it titled  13 that. There are different versions of it that I've  14 seen.  15 Q. Yeah. Did you undertake any analysis to  16 evaluate whether or not the suggestions would have  17 improved the flow?  18 A. Is it possible to see that document?  19 I'm not sure to what extent I quote it in  20 here.  21 Q. I'm just asking you if you did any analysis to  22 look at the proposed alternative flow and compare it to  23 the existing flow that you did look at.  24 MR. AIJAZ: Objection. Vague.  25 And she asked for the document you're</p> <p style="text-align: right;">Page 73</p>



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<p>1 referring to so that we're on the same page.</p> <p>2 MR. HUMMEL: She knows whether or not she did</p> <p>3 the analysis, whether or not she was looking at the</p> <p>4 document.</p> <p>5 THE WITNESS: I looked at the document. I --</p> <p>6 I looked at the suggestions it made. I thought some of</p> <p>7 them resonated with the critiques I had of the existing</p> <p>8 flow.</p> <p>9 And -- sorry, remind me -- was there a more</p> <p>10 specific question you had there?</p> <p>11 BY MR. HUMMEL:</p> <p>12 Q. Did you do an analysis of whether the</p> <p>13 suggestion made the flow -- improved the flow?</p> <p>14 A. I mean, I have opinions about it. I'm not</p> <p>15 sure what you mean by "analysis."</p> <p>16 Q. An A/B test?</p> <p>17 A. So if you mean a particular test to improve</p> <p>18 that, no, I did not.</p> <p>19 Q. Did you do any empirical analysis to evaluate</p> <p>20 whether the suggestion would have improved the flow?</p> <p>21 MR. AIJAZ: Objection. Vague.</p> <p>22 THE WITNESS: No. That would have required</p> <p>23 conducting a user test.</p> <p>24 BY MR. HUMMEL:</p> <p>25 Q. Do you agree with me that the question</p> <p style="text-align: right;">Page 74</p>	<p>1 testimony.</p> <p>2 THE WITNESS: That is, if you are doing a</p> <p>3 heuristic analysis from the perspective of, let's say,</p> <p>4 an employee attempting to improve it for your employer</p> <p>5 or your client.</p> <p>6 BY MR. HUMMEL:</p> <p>7 Q. Do you have any authority for the proposition</p> <p>8 that a heuristic analysis, standing alone without any</p> <p>9 empirical -- empirical study or usability study, can be</p> <p>10 used to assess whether a website or flow on a website</p> <p>11 is simple or not?</p> <p>12 MR. AIJAZ: Objection. Vague.</p> <p>13 THE WITNESS: Can you please reread that</p> <p>14 question?</p> <p>15 MR. HUMMEL: Could you read that back, please?</p> <p>16 (Record read as follows:</p> <p>17 "QUESTION: Do you have any authority for the</p> <p>18 proposition that a heuristic analysis,</p> <p>19 standing alone without any empirical --</p> <p>20 empirical study or usability study, can be</p> <p>21 used to assess whether a website or flow on a</p> <p>22 website is simple or not?")</p> <p>23 THE WITNESS: So the authority is my expertise</p> <p>24 and my education and the sources I cite to back that up</p> <p>25 throughout the report.</p> <p style="text-align: right;">Page 76</p>
<p>1 presented by the FTC in -- on page 3, "Was the</p> <p>2 cancellation process easy," would you agree with me</p> <p>3 that the question they asked you was not whether it</p> <p>4 could be made easier or more simple; the question is</p> <p>5 whether it is easy or not.</p> <p>6 It's binary. Right?</p> <p>7 MR. AIJAZ: Objection. Misstates the</p> <p>8 document.</p> <p>9 THE WITNESS: Well, as I understood it, I was</p> <p>10 being asked to evaluate that question for 2016, 2018,</p> <p>11 and 2022.</p> <p>12 BY MR. HUMMEL:</p> <p>13 Q. Right.</p> <p>14 And the question was not whether it could be</p> <p>15 improved or made simpler or easier; the question is:</p> <p>16 Is it simple or easy? Correct?</p> <p>17 MR. AIJAZ: Objection. Misstates the</p> <p>18 document.</p> <p>19 THE WITNESS: I mean, yes, that's how I</p> <p>20 answered those questions.</p> <p>21 BY MR. HUMMEL:</p> <p>22 Q. Okay. And the very purpose of a heuristic</p> <p>23 analysis, as we discussed before, is to find potential</p> <p>24 problems and propose solutions to the problems. Right?</p> <p>25 MR. AIJAZ: Objection. Misstates prior</p> <p style="text-align: right;">Page 75</p>	<p>1 BY MR. HUMMEL:</p> <p>2 Q. There's not a single source -- and I've read</p> <p>3 them all; they're here -- not a single source discusses</p> <p>4 using a heuristic analysis to determine whether</p> <p>5 something is simple or not. Not one. Never</p> <p>6 referenced.</p> <p>7 MR. AIJAZ: Objection. Foundation.</p> <p>8 BY MR. HUMMEL:</p> <p>9 Q. So my question is -- your answer is "your</p> <p>10 expertise."</p> <p>11 A. It's a method.</p> <p>12 Q. I understand that.</p> <p>13 But I'm asking you: Is there any authority</p> <p>14 for the proposition that a heuristic analysis, standing</p> <p>15 alone without an accompanying empirical study or</p> <p>16 usability study, can be used to assess whether</p> <p>17 something is simple or not?</p> <p>18 MR. AIJAZ: Objection. That's the same</p> <p>19 question that you asked and she answered.</p> <p>20 MR. HUMMEL: She didn't answer it.</p> <p>21 Q. And I'm asking: Is the sole authority your</p> <p>22 expertise?</p> <p>23 MR. AIJAZ: Same objection.</p> <p>24 THE WITNESS: My sense is that you</p> <p>25 misunderstand the method.</p> <p style="text-align: right;">Page 77</p>

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<p>1 I mean, it's -- it is a way of conducting 2 research. You can use it across many contexts. It's 3 not necessarily that you must have an existing -- 4 another author who has said, "I have used this to study 5 cancellations." 6 So it is a -- I mean, my expertise is a 7 synthesis of the research, you know, across this field 8 and, as I cite in my report, to bring to bear on the 9 question presented in here. 10 Now, you know, has a heuristic analysis ever 11 been used to answer this question outside of my work? 12 Most likely, it has; it just isn't necessarily that 13 other people have documented it in such a way that they 14 have publicly stated it. 15 BY MR. HUMMEL: 16 Q. In the -- in two of the cases that you cited 17 where you provided an expert opinion, Commerce Planet 18 and then FTC via Amazon, in the FTC v. Amazon case, you 19 used a heuristic analysis of the in-app purchase 20 process. Correct? 21 A. Yes. 22 Q. And you looked at an analysis of consumer 23 complaints. Right? 24 A. Yes. 25 Q. Why didn't you include your analysis of</p> <p style="text-align: right;">Page 78</p>	<p>1 A. Well, he's an economist. He has no background 2 in qualitative research, so I'm not exactly sure why 3 he's offered to have a basis on evaluating qualitative 4 research. 5 Q. What basis did you have to assess the veracity 6 and reliability of the complaint that you assessed? 7 A. Because I have been trained in qualitative 8 methods. 9 Q. You didn't talk to any of those consumers. 10 Right? 11 A. No. I did not. 12 Q. You read reports that they had submitted. 13 Correct? 14 A. Well, some of them appear to be transcripts or 15 summaries by customer service agents, and some appear 16 to be actual emails. 17 Q. Hold on. That's a very important distinction. 18 How many were transcripts versus summaries? 19 A. I am not sure. 20 Q. Were there any transcripts? 21 A. Well, I mean, I don't know if they were 22 transcripts or notes put in by customer service agents. 23 Q. Very -- 24 A. That's not entirely clear. 25 Q. Well, did you ask?</p> <p style="text-align: right;">Page 80</p>
<p>1 consumer complaints in your initial report? 2 A. So the initial report was conducted on an 3 extremely tight timeline, first off, and I did not have 4 time to review consumer complaints in that time period. 5 Q. So you intended to do it but didn't have time? 6 A. It was certainly on the table. 7 I mean, it depended, quite frankly, on -- in 8 part on what Mr. Ward's report was going -- what 9 territory he was covering. 10 Q. Yeah. 11 In what way does your analysis of -- your 12 purported analysis of consumer complaints rebut what 13 Mr. -- anything that Mr. Ward said? 14 It doesn't rebut his heuristic analysis, does 15 it? 16 A. I think it offers firsthand opinions from 17 actual customers as to the problems they experienced on 18 the site, and many of those things speak directly to 19 the design of the site and specific issues that they 20 encountered. 21 Q. Have you read Mr. Langenfeld's critique of 22 your consumer complaint analysis? 23 A. I have. 24 Q. Do you have any questions or concerns about 25 his analysis?</p> <p style="text-align: right;">Page 79</p>	<p>1 A. There is a column in the spreadsheet that 2 appears to denote where the source is, but when looking 3 at those, it isn't entirely always clear to me if it 4 were -- if it was an agent summarizing or, you know, if 5 they're quoting from something. 6 Q. My question was: Did you ask whether or not 7 these are verbatim quotes, or are they summaries of 8 what the customer service agent perceived the consumer 9 to have said? 10 A. No. I did not ask. 11 Q. Okay. So you can't testify one way or the 12 other as to what they, in fact, are. Correct? 13 MR. AIJAZ: Objection. Vague. 14 THE WITNESS: I mean, I can tell you what I 15 understand them to be. 16 BY MR. HUMMEL: 17 Q. What do you understand them to be? 18 A. They are either quotes from customer service 19 agents or summaries from customer service agents. 20 Q. Does it matter which one to you? 21 MR. AIJAZ: Objection. Vague. 22 THE WITNESS: I would say it really depends on 23 the -- the content inside -- or discussed in each one. 24 BY MR. HUMMEL: 25 Q. If someone calls up customer service,</p> <p style="text-align: right;">Page 81</p>

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<p>1 hypothetically, and complains about the cancellation 2 flow but it can be verified that they never attempted 3 to enter the cancellation flow, do you consider their 4 complaint valid? 5 A. Definitely. 6 MR. AIJAZ: Objection. Calls for speculation. 7 BY MR. HUMMEL: 8 Q. Definitely? 9 A. Yes. 10 Q. How would -- if they've never even experienced 11 the flow? 12 A. Because some of those people were calling in 13 because they could not figure out how to enter or even 14 accomplish the cancellation flow. 15 Q. For those people that had comments about the 16 flow unrelated to their ability to find it but they had 17 never demonstrably entered the flow, do you consider 18 the complaint valid? 19 MR. AIJAZ: Objection. Vague. 20 THE WITNESS: Yes. I do consider that to be 21 valid. 22 BY MR. HUMMEL: 23 Q. Did you consider the motivation of people 24 calling at all in assessing your complaints? 25 MR. AIJAZ: Objection. Vague.</p> <p style="text-align: right;">Page 82</p>	<p>1 research? 2 A. Yes, I do. 3 Q. Do you have a degree in user experience 4 research? 5 A. I have a Ph.D. in information management and 6 systems with a concentration in humanity-computer 7 interaction, law and policy, and social computing. 8 Q. What was your thesis? 9 A. My thesis was on -- my primary area of 10 expertise is in privacy in HCI, and my thesis was on -- 11 it was entitled "Privacy" -- oh, gosh, I forgot the 12 title of my thesis. It's been a while. 13 Is it in my CV? Let me double-check. It's 14 been five years. As a matter of fact -- sorry -- 15 "Privacy and Social Exchange Theory." 16 Q. What is that? 17 What's the Readers Digest version of your 18 thesis title? 19 What were you exploring? 20 A. Well, in my CV, I tell you. I used a social 21 relational framework to explore consumer motivations 22 for disclosing personal information to companies. 23 Q. So your thesis wasn't in website usability. 24 Correct? 25 A. No. It was not specifically in website</p> <p style="text-align: right;">Page 84</p>
<p>1 THE WITNESS: I mean, what do you mean by 2 "motivation," exactly? 3 BY MR. HUMMEL: 4 Q. They were calling to get a refund -- 5 MR. AIJAZ: Objection. Foundation. 6 BY MR. HUMMEL: 7 Q. -- as opposed to actually having a complaint 8 about the flow, a bona fide complaint about the flow? 9 A. So are you suggesting that people are calling 10 and lying? 11 Q. Yes. 12 MR. AIJAZ: Objection. Foundation. 13 BY MR. HUMMEL: 14 Q. Did you consider that? 15 A. No. I did not. 16 Q. Are you an expert in consumer perception? 17 A. Consumer perception of what? 18 Q. Consumer perception of things that appear to 19 them on a website. 20 A. Yes, although that's not how I would describe 21 it, I guess. 22 Q. Are you a user experience researcher? 23 A. That's not my title, but I would consider that 24 one of my skills. 25 Q. Do you have an expertise in user experience</p> <p style="text-align: right;">Page 83</p>	<p>1 usability issues, but I have published in that area. 2 Q. Are you an expert web designer? 3 A. No. I am not a web designer. 4 Q. Are you an expert app designer? 5 A. No. By "app" -- well, let me -- what do you 6 mean by "app designer"? 7 Q. Do you design apps that can be purchased on 8 the -- 9 A. Technical design? Visual design? 10 (The reporter requested that people not speak 11 at once.) 12 THE WITNESS: I'm sorry. Technical? Visual? 13 All of the above? I'm not sure where you're going. 14 BY MR. HUMMEL: 15 Q. All of the above. 16 Do you consider yourself an expert in app 17 design? 18 A. I do not design apps, but I understand a lot 19 about the technical capacity of mobile apps. 20 Q. Are you an expert graphic designer? 21 A. No. I do not practice graphic design. 22 Q. Have you ever designed a website for a paying 23 client? 24 MR. AIJAZ: Objection. Vague. 25 THE WITNESS: I have designed a website for an</p> <p style="text-align: right;">Page 85</p>

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<p>1 The NPS survey is that -- "How likely is it 2 you would recommend Match.com to a friend?" 3 Q. Yes. 4 A. All right. We're on the same page, literally, 5 now. 6 Q. Did you ever attempt to assess how long it 7 takes a consumer to answer that question on the 0 to 10 8 scale? 9 A. No, I did not. 10 Q. What percentage of the consumers on this flow 11 actually answered the open-ended question presented in 12 the survey, which is: "In your own words, how can you 13 make finding love easier?" 14 A. I was not given data on that point. 15 Q. But did you attempt to figure that out? 16 A. No, I did not. 17 Q. Did you attempt to figure out how long on 18 average consumers spent answering that open-ended 19 question? 20 A. How long consumers spent -- 21 Q. Answering that open-ended question. 22 A. Oh. No, I did not. 23 Q. So the FTC in their guidance on cancellation 24 flows has a couple of things that they say. 25 One is, it should be no more -- it should be</p> <p style="text-align: right;">Page 90</p>	<p>1 negative option marketing? 2 A. I haven't looked at it in the last few months, 3 so I don't remember that specifically. I'd need to 4 look at the document. 5 Q. So you don't recall whether one of the tests 6 the FTC has for assessing surveys or save offers in the 7 context of cancellation flows, whether it unreasonably 8 delays the process of canceling? 9 A. It doesn't -- that's not surprising to me, but 10 I am just saying I haven't looked at that document in 11 some time. So -- 12 Q. And because you didn't measure the time it 13 takes an average consumer or consumers, generally, to 14 accomplish the surveys or to consider and either accept 15 or reject the save offer, you have no opinion about 16 whether those aspects of Match.com's cancellation flow 17 unreasonably delay the process of cancellation. 18 Correct? 19 MR. AIJAZ: Objection. Foundation. And form. 20 THE WITNESS: No. I think I disagree with the 21 way you phrased that. 22 BY MR. HUMMEL: 23 Q. Okay. How so? 24 A. I apologize. Can you please repeat the 25 question?</p> <p style="text-align: right;">Page 92</p>
<p>1 no more difficult than it was to sign up generally. 2 Right? 3 We talked about that before. 4 MR. AIJAZ: Objection. Foundation. Misstates 5 the guidance and calls for legal analysis. 6 BY MR. HUMMEL: 7 Q. That's one of -- I'm just referring -- point 8 of reference. Right? 9 And the other thing they said -- do you 10 recall, generally, that topic -- 11 A. Yes, proportionality. 12 Q. Yeah, yeah. Okay. Fine. That's a good way 13 to refer to it. 14 And you did nothing to assess proportionality. 15 We already talked about that. Correct? 16 A. Yes. We talked about that. 17 Q. And the other thing it says is, it's okay to 18 present a save offer or to have surveys so long as they 19 don't take an unreasonable -- so long as they don't 20 unreasonably delay the cancellation process. 21 Do you recall that language? 22 MR. AIJAZ: Objection. Foundation. 23 THE WITNESS: I'm sorry, from where again? 24 BY MR. HUMMEL: 25 Q. From the FTC guidance that you referenced on</p> <p style="text-align: right;">Page 91</p>	<p>1 (Record read as follows: 2 "QUESTION: And because you didn't measure the 3 time it takes an average consumer or 4 consumers, generally, to accomplish the 5 surveys or to consider and either accept or 6 reject the save offer, you have no opinion 7 about whether those aspects of Match.com's 8 cancellation flow unreasonably delay the 9 process of cancellation. Correct?") 10 THE WITNESS: Okay. No. I disagree with that 11 statement. 12 I mean, I certainly have opinions about 13 whether or not I believe it obstructed or caused, you 14 know, some additional work for the consumer. 15 You know, precisely the timing, no. That, I 16 do not have data on. 17 BY MR. HUMMEL: 18 Q. Do you know what percentage of consumers did 19 not complete the cancellation process because they 20 accepted a save offer? 21 A. I feel like I have seen that statistic in 22 either Langenfeld or Ward's rebuttal reports, but we'd 23 have to look at it precisely because I'm not sure. 24 But, again, I also don't -- I can't say with 25 confidence that I know exactly how those things are</p> <p style="text-align: right;">Page 93</p>

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<p>1 being measured.</p> <p>2 So, of course, I would have questions about</p> <p>3 the statistic itself, but I have seen a number included</p> <p>4 in those reports.</p> <p>5 Q. What prevented you from performing your own</p> <p>6 usability study on any of the Match.com flows that you</p> <p>7 analyzed?</p> <p>8 MR. AIJAZ: Objection. Foundation.</p> <p>9 THE WITNESS: Nothing prevented me from doing</p> <p>10 it. I generally don't find it to be necessary if there</p> <p>11 is supporting information that would -- that would add</p> <p>12 context to my heuristic evaluation.</p> <p>13 BY MR. HUMMEL:</p> <p>14 Q. What evidence do you have that stores the</p> <p>15 proposition or the assumption on your part that</p> <p>16 consumers who reach the password page intend to cancel</p> <p>17 their subscription?</p> <p>18 A. Well, I think I need to look at the</p> <p>19 screenshots in order to --</p> <p>20 Do we have different screenshots beyond what's</p> <p>21 in my report, or are we just going to refer to these</p> <p>22 today?</p> <p>23 Q. I have them. I have the screenshots for the</p> <p>24 three flows you analyzed --</p> <p>25 A. I mean, do we have -- because these are a</p> <p style="text-align: right;">Page 94</p>	<p>1 And I believe, also, some of the consumer --</p> <p>2 I'm sorry, not the consumer -- I believe some of the</p> <p>3 company emails, documents, I reviewed, attest to the</p> <p>4 fact that people hit that password page and found it to</p> <p>5 be a stumbling block.</p> <p>6 Q. What percentage of individuals who reached the</p> <p>7 password page did not ultimately cancel because they</p> <p>8 couldn't get past that password page?</p> <p>9 A. That, I don't have data on.</p> <p>10 Q. Okay. Was there anything you could have done</p> <p>11 to investigate that question?</p> <p>12 A. Well, again, if -- if we had had, I guess,</p> <p>13 data on those points that tracked precisely to the</p> <p>14 pages over the time period in which I was analyzing at</p> <p>15 the time I was writing this, that could have</p> <p>16 potentially added some context.</p> <p>17 Q. Is it your opinion that by having a password</p> <p>18 page requirement, the cancellation flow is not simple?</p> <p>19 MR. AIJAZ: Objection. Form.</p> <p>20 THE WITNESS: No. I would restate that</p> <p>21 myself.</p> <p>22 I mean, it is one of multiple factors that, I</p> <p>23 think, make the flow less simple, but it is not, like,</p> <p>24 a single, determinative feedback or on its -- alone</p> <p>25 that makes the flow less simple or easy.</p> <p style="text-align: right;">Page 96</p>
<p>1 little bit hard to read, and they're not in color.</p> <p>2 MR. HUMMEL: Let's mark all of them.</p> <p>3 Let's go off the record.</p> <p>4 (Discussion off the record.)</p> <p>5 (Deposition Exhibits 5, 6, and 7 were marked</p> <p>6 for identification.)</p> <p>7 MR. HUMMEL: All right. We took a break to</p> <p>8 mark some exhibits which are the pages of the flows</p> <p>9 that Dr. King elected to put in her report.</p> <p>10 Q. The question remains the same, which is: What</p> <p>11 evidence do you have that supports the proposition that</p> <p>12 consumers who reach the password page intend to cancel</p> <p>13 their subscription?</p> <p>14 A. So I believe that there was some -- there has</p> <p>15 been data provided on this point, but I didn't have it</p> <p>16 when I was writing the report.</p> <p>17 But I don't know if -- I don't know the status</p> <p>18 of where that is in this larger discussion.</p> <p>19 Q. So the answer is you don't know?</p> <p>20 A. I didn't have that data specifically at the</p> <p>21 time I wrote the report, but I have since -- although I</p> <p>22 can't -- again, I don't know precisely -- I haven't</p> <p>23 seen the spreadsheet, I don't know where the data has</p> <p>24 been crunched, but it's been relayed to me that there</p> <p>25 was some significant dropoff at that stage.</p> <p style="text-align: right;">Page 95</p>	<p>1 BY MR. HUMMEL:</p> <p>2 Q. Now, in your report, you describe the</p> <p>3 heuristic analysis in which you engaged. Right?</p> <p>4 A. Yes.</p> <p>5 Q. And you also described the -- what you believe</p> <p>6 to have been dark patterns in the cancellation flow.</p> <p>7 Correct?</p> <p>8 A. Yes.</p> <p>9 Q. Now, Nielsen has ten heuristics to utilize in</p> <p>10 connection with evaluating user experience. Correct?</p> <p>11 A. Ten. Yes, ten.</p> <p>12 Q. And in your report, you describe violation of</p> <p>13 only three heuristics; that is, starting on page 35:</p> <p>14 "Visibility of System Status, Consistency and</p> <p>15 Standards, Aesthetic and Minimalist Design." Correct?</p> <p>16 A. Yes. Those were the three I had the greatest</p> <p>17 concerns with.</p> <p>18 Q. You didn't opine or offer any opinions about</p> <p>19 the other seven heuristics in your report. Correct?</p> <p>20 A. Right. I did not.</p> <p>21 Q. And you did not comment on the -- let</p> <p>22 me -- Nielsen's usability components, the five</p> <p>23 usability components that he's published about.</p> <p>24 Correct?</p> <p>25 A. Correct.</p> <p style="text-align: right;">Page 97</p>



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<p>1 Q. So you didn't evaluate Heuristic Number 2, 2 which is the "Match between the system and the real 3 world." Correct? 4 A. Correct. 5 Q. And you didn't evaluate Heuristic Number 3, 6 which is "User control and freedom." Correct? 7 A. Well, actually, it's not that I didn't 8 evaluate them. I didn't find them relevant. Let's 9 make that clear. 10 It's not like I skipped them. I looked at all 11 ten, and I applied the ones I thought that the -- the 12 cancellation flow potentially violated. 13 Q. Right. So you didn't think it violated 14 Heuristic 2, which is "Match between the system and the 15 real world," because you didn't put that in your 16 report. Correct? 17 A. Correct. 18 Q. And you didn't think it violated Heuristic 3, 19 which is "User control and freedom." Correct? 20 A. Correct. 21 Q. And you didn't opine that the Match 22 cancellation flow violated Heuristic 5, which is "Error 23 prevention." Correct? 24 A. Correct. 25 Q. And you didn't opine that the Match</p> <p style="text-align: right;">Page 98</p>	<p>1 Q. And you understand that the opinions that 2 you're going to be allowed to testify about at trial 3 are those that are contained in your report. Correct? 4 A. Correct. 5 MR. AIJAZ: Objection. Calls for a legal 6 conclusion and analysis and foundation. 7 BY MR. HUMMEL: 8 Q. That's your understanding. Right? 9 A. That's -- yes. 10 Q. Why was it that you didn't consider any of 11 Nielsen's usability components -- strike that. 12 Why is it that you didn't opine about any of 13 Nielsen's usability components in your expert report? 14 A. Those are components that, generally, are not 15 something I use in my work. 16 Q. Why? 17 A. They -- I just haven't seen them as relevant. 18 Q. So learnability, efficiency, memorability, 19 errors, and satisfaction are not relevant? 20 A. They are -- for the purposes of -- of my 21 analysis, no. I wasn't concerned with reviewing those 22 components. 23 Let's go back and talk about your expertise. 24 A. Sure. 25 Q. You hold yourself out as an information</p> <p style="text-align: right;">Page 100</p>
<p>1 cancellation flow violated Heuristic 6, which is 2 "Recognition rather than recall." Correct? 3 A. Right. 4 Q. And you didn't opine that the Match 5 cancellation flow violated Heuristic 7, which is 6 "Flexibility and efficiency of use." Correct? 7 A. Correct. 8 Q. And you didn't opine that the Match 9 cancellation flow violated Heuristic Number 9, which is 10 "Help users recognize, diagnose, and recover from 11 errors." Correct? 12 A. Correct. 13 Q. And you didn't opine about -- you didn't opine 14 that Match's cancellation flow violated Heuristic 15 Number 10, "Help and documentation." 16 Do you see that? 17 A. I do. 18 Q. Is that true? 19 A. I did not include that. 20 Retrospectively, I might have included it the 21 more I considered questions around those help pages, 22 but -- but the -- 23 Q. Right. But it's not in your report. Correct? 24 That's all I'm saying. 25 A. Right. It's not in my report.</p> <p style="text-align: right;">Page 99</p>	<p>1 privacy expert. Correct? 2 A. Yes. 3 Q. This case doesn't involve information privacy. 4 Right? 5 A. That's true. 6 Q. Are you an expert in cognitive psychology? 7 A. I am an expert in some aspects of cognitive 8 psychology as they relate to HCI; but, no, I am not a 9 cognitive psychologist. 10 Q. Are you familiar with Shari Diamond's treatise 11 on appropriate consumer surveys? 12 A. No, I'm not. 13 Q. So I take it you didn't use any of her 14 criteria for assessing whether Mr. Ward's usability 15 study satisfied the criteria that Shari Diamond set 16 forth for such consumer empirical study. 17 MR. AIJAZ: Objection. Foundation. 18 THE WITNESS: I don't believe I've ever 19 covered her work in my survey research background. 20 BY MR. HUMMEL: 21 Q. What is survey bias? 22 A. I think that could have potentially several 23 answers. 24 Can you be more specific? I'm not sure where 25 you're -- what you mean precisely.</p> <p style="text-align: right;">Page 101</p>

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<p>1 Q. So one of the -- I'll just represent to you 2 that one of the problems in consumer surveys is that 3 the design of the survey biases the answers. Right? 4 So that you're not getting a reliable, 5 accurate test because the survey design itself leads 6 consumers or survey participants to a particular 7 response in a way that renders the methodology 8 unreliable. 9 Do you understand that? 10 A. Yes. That's one form of bias. There are also 11 many others. 12 Q. Right. So do you believe that Mr. Ward's 13 usability study pointed consumers -- or participants in 14 a direction that made the results unreliable; and, if 15 so, how? 16 A. So I have many concerns with the design of his 17 study. 18 And certainly the fact that it was extremely 19 bounded and basically told people what they were going 20 to do from the start and gave them a task rather than 21 presenting it in a way that might uncover how they 22 found things or how they cancelled more 23 naturalistically potentially biases the results of that 24 work. 25 Q. All right. When you say that a -- are you</p> <p style="text-align: right;">Page 102</p>	<p>1 Q. Okay. So my question is this: 2 The purpose of the usability study in the Ward 3 example was what, if you know? 4 MR. AIJAZ: Objection. Calls for speculation. 5 BY MR. HUMMEL: 6 Q. What's the stated purpose? 7 A. May I see his report again? 8 Q. Well, do you -- can you testify as to what you 9 understand his purpose to be without referencing his 10 report? 11 A. My high-level understanding is that it was a 12 time-to-task study where he was testing how long it 13 took people to sign up for Match.com and how long it 14 took them to cancel it. 15 Q. So if you're measuring how long it takes 16 somebody to cancel or whether they effectively complete 17 the task, regardless of how long, and time and whether 18 they make errors and those types of things, don't you 19 have to tell them, sign on and then cancel? 20 MR. AIJAZ: Objection. Foundation. 21 THE WITNESS: You can -- you can design a 22 multitude of different studies in different ways. 23 BY MR. HUMMEL: 24 Q. My question is very pointed. 25 What, specifically, would you have to tell a</p> <p style="text-align: right;">Page 104</p>
<p>1 saying that the assignment itself for the survey 2 participants created a survey bias? 3 MR. AIJAZ: Objection. Vague. 4 THE WITNESS: Let me grab my rebuttal report 5 just to make sure I have it clear. 6 MR. HUMMEL: So the record reflects, the 7 witness is looking at her rebuttal report, Exhibit 2. 8 THE WITNESS: So I discuss this on page 14 of 9 my rebuttal report. 10 BY MR. HUMMEL: 11 Q. Page 14? 12 A. Yes. 13 Q. Okay. Let me get it. Thanks. 14 A. In Section C. 15 Q. Yeah. 16 A. So I wrote here that: 17 "The testing task itself and the 18 instructions almost" -- I'm sorry -- "also 19 must not influence the outcome of the study. 20 This practice is a basic component of both 21 experimental design and usability testing. 22 Blinding users to the intent of a study avoids 23 demand effects such as response bias, where 24 responses provide answers based on their 25 expectations of the topic of the study."</p> <p style="text-align: right;">Page 103</p>	<p>1 survey participant to do or a study participant to do 2 in order to measure whether they can readily use the 3 cancellation flow? 4 A. Ideally, you would give them a task that would 5 ideally yield an outcome of testing the cancellation 6 flow without giving them the precise instruction, "Go 7 cancel your subscription." 8 Q. What else would you tell them to do? 9 MR. AIJAZ: Objection to scope and calls for 10 speculation. 11 MR. HUMMEL: Well, she's critiqued his report 12 based on bias. It's not beyond the scope. 13 Q. The question is: What would you tell them to 14 do other than "Go cancel"? 15 MR. AIJAZ: Same objection. Scope. 16 THE WITNESS: Well, I mean, first, there is an 17 assumption here that I would have designed a survey 18 study, which I may not have. 19 BY MR. HUMMEL: 20 Q. Say it again? I'm sorry. I missed it. 21 A. Well, first, there is an assumption here that 22 I would have designed the same type of study, which I 23 may not have. 24 Q. Right. So assuming you're designing a study, 25 and you want to test whether people can effectively</p> <p style="text-align: right;">Page 105</p>

<p>1 accomplish the task of canceling on the Match.com flow 2 and how long it takes them -- let's assume that's your 3 goal. Right? 4 What would you tell a consumer to do other 5 than "Go cancel"? 6 MR. AIJAZ: Objection. Calls for speculation. 7 Outside the scope. And it's an incomplete 8 hypothetical. 9 THE WITNESS: I would likely give them a 10 scenario that presented them with kind of a range of -- 11 of preconditions that would ideally direct them towards 12 cancel without the explicit instruction "Cancel your 13 account." 14 BY MR. HUMMEL: 15 Q. All right. So in the real world, if a paying 16 subscriber to Match wants to cancel, what do you think 17 they want to do? 18 MR. AIJAZ: Objection. Vague and calls for 19 speculation. 20 THE WITNESS: Yeah, I'm not sure what you're 21 asking me. I apologize. 22 BY MR. HUMMEL: 23 Q. They want to cancel. Correct? 24 So somebody who is a paying subscriber and 25 they meet the love of their life, they don't want to be</p> <p style="text-align: right;">Page 106</p>	<p>1 Manage Subscription." Right? 2 A. I don't believe he did, no. 3 I think the instruction was "Cancel your 4 account" or something along those lines. 5 Q. At what point in the Match cancellation flow 6 can you ascertain as an expert, based on your heuristic 7 analysis, that a consumer actually intends to cancel 8 when they click on the icon? 9 MR. AIJAZ: Objection. Vague. 10 BY MR. HUMMEL: 11 Q. In other words, does your heuristic analysis 12 answer that question of consumer intent? 13 MR. AIJAZ: Same objection and -- 14 THE WITNESS: And heuristic analysis is 15 designed, or used, to map out or first reveal the flow, 16 and then to analyze every step in it, looking for 17 potential flaws. 18 BY MR. HUMMEL: 19 Q. Mr. Ward, in his survey, didn't instruct 20 consumers to accomplish the cancellation task as 21 quickly as possible, did he? 22 MR. AIJAZ: Objection. Foundation. 23 THE WITNESS: I believe he counseled them to 24 do it efficiently, if I'm remembering correctly. 25</p> <p style="text-align: right;">Page 108</p>
<p>1 on Match.com anymore, and they go to the flow, what do 2 they want to do? 3 A. Ideally, cancel their account -- 4 Q. Right. So isn't that exactly -- 5 A. -- or subscription, I should say specifically. 6 (The reporter requested that people not speak 7 at once.) 8 BY MR. HUMMEL: 9 Q. So isn't the survey designed -- designed by 10 Mr. Ward replicating exactly the task that a real-world 11 subscriber would want to accomplish? 12 MR. AIJAZ: Objection. Foundation. 13 THE WITNESS: It replicates it in a 14 non-naturalistic way that encourages by design for 15 people to complete it as quickly as they possibly can. 16 BY MR. HUMMEL: 17 Q. Mr. Ward didn't say in his survey, to your 18 knowledge, "Find the cancellation flow by looking at 19 the icon." Correct? 20 A. I don't believe so. 21 Q. And he didn't tell them what to click on after 22 they clicked on the icon. Correct? 23 MR. AIJAZ: Objection. Vague. 24 BY MR. HUMMEL: 25 Q. In other words, he didn't tell them "Click on</p> <p style="text-align: right;">Page 107</p>	<p>1 BY MR. HUMMEL: 2 Q. He didn't say "as quickly as possible." 3 Right? 4 A. No, but he did say efficiently. 5 Q. He didn't tell them to ignore the surveys. 6 Right? 7 A. No. He did not. 8 Q. In terms of the heuristic analysis that you 9 performed, how many heuristics need not be met in order 10 for a website or web flow to be considered not simple? 11 MR. AIJAZ: Objection. Calls for speculation. 12 THE WITNESS: I would argue that's a 13 misunderstanding of the method. 14 BY MR. HUMMEL: 15 Q. That's not my question, though. 16 So let's assume -- let's assume for this -- 17 for the hypothetical -- this hypothetical question that 18 three of the heuristics are not met, in your opinion; 19 seven are, or at least you don't opine about seven. 20 Is three enough to render it not simple in 21 your opinion? 22 MR. AIJAZ: Objection. Calls for speculation. 23 It's an incomplete hypothetical. 24 THE WITNESS: A heuristic analysis is not a 25 test. It's not a quantitative inventory of errors. It</p> <p style="text-align: right;">Page 109</p>



<p>1 is a way of surfacing potential defects.  2 And so there isn't a numeric threshold that  3 you have to meet to say "This is not usable" and "This  4 is usable" with a heuristic analysis.  5 It depends on the types of defects you are  6 spotting, the context in which they're in, and the  7 severity of them.  8 So there can be -- you could do a heuristic  9 analysis and identify a single factor that, if you were  10 in the process of designing a website, that someone  11 might say, "You may not launch this website with this  12 single defect. Everything else is great, but this  13 one -- this is completely unusable, and your customers  14 will leave."  15 So it's not about counting them per se or  16 having a quantitative threshold; it's about looking  17 across the process, looking across the flow,  18 understanding them in context, and then understanding  19 the severity.  20 And sometimes these things are independent,  21 but often they are interdependent.  22 BY MR. HUMMEL:  23 Q. Can you tell, based on your heuristic analysis  24 that you performed for purposes of your initial report,  25 how many consumers who, in the real world, attempted to</p> <p style="text-align: right;">Page 110</p>	<p>1 (Deposition Exhibit 8 was marked for  2 identification.)  3 MR. HUMMEL: Exhibit 8 is the expert report of  4 Brandon Ward dated January 13, 2023.  5 THE WITNESS: Are we still on the record?  6 MR. AIJAZ: We are.  7 Chad, do you want to go off for a second?  8 MR. HUMMEL: Yeah. Let's go off.  9 (Discussion off the record.)  10 MR. HUMMEL: Back on the record.  11 THE WITNESS: Yeah, I -- yeah, I believe this  12 is where he talks about this, page 55.  13 Okay. So back to the question.  14 MR. AIJAZ: So we'll go back on?  15 MR. HUMMEL: Sure.  16 Would you mind reading back the question?  17 (Record read as follows:  18 "QUESTION: Going back to the Ward usability  19 study, you had a critique in the universe of  20 survey participants?  21 "ANSWER: Yes, I did.  22 "QUESTION: What is that critique?"  23 THE COURT REPORTER: And that looks like the  24 pending question.  25 THE WITNESS: There is also an appendix to</p> <p style="text-align: right;">Page 112</p>
<p>1 cancel were unable to cancel as a result of the  2 heuristics that you found were violated as a matter of  3 percentage?  4 A. No, not a precise number. I could certainly  5 go back through the comments I reviewed to get a better  6 sense of how many people listed issues that I  7 classified as relating to those things, but when you do  8 a qualitative analysis, the point is not to offer  9 statistics; the point is to look at themes.  10 So I do tally those up in that section, but I  11 don't pull them out as saying 25 percent said this,  12 60 percent said that because I think that would be  13 misleading.  14 Q. Going back to the Ward usability study, you  15 had a critique in the universe of survey participants?  16 A. Yes, I did.  17 Q. What is that critique?  18 A. Okay. Let's see.  19 Do we have his report so that I could --  20 Q. Sure.  21 A. -- see the original sentence that he used --  22 MR. HUMMEL: Yep. Let's mark it as  23 Exhibit Number 8.  24 THE WITNESS: -- because I don't quote that  25 sentence.</p> <p style="text-align: right;">Page 111</p>	<p>1 this. Right?  2 Appendix C, the full study methodology?  3 BY MR. HUMMEL:  4 Q. Yep.  5 A. That might be actually where he discusses this  6 in more it depth because I don't think this is -- this  7 is very short. So I think my critique was centered on  8 his Appendix C.  9 Q. Okay. So I'm referring you to your opinions  10 in your rebuttal report on pages 13 and 14.  11 A. Right. Yes. But page 55 is very brief, and I  12 think he does the full study methodology in Appendix C.  13 And that's what I reviewed because I think he  14 makes -- he makes a fuller statement in Appendix C  15 about who he considered as potential subjects for the  16 study.  17 Q. Right. So are you saying that -- is it your  18 opinion that Mr. Ward did not have a sufficiently  19 representative demographic in his study such that it  20 would mean the results were unreliable?  21 A. Can we see Appendix C?  22 I want to --  23 Q. I don't have it.  24 A. Can we get it?  25 Q. I'm asking you your opinion because you put a</p> <p style="text-align: right;">Page 113</p>

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<p>1 critique in your report about sample population 2 demographics and ability.</p> <p>3 Are you saying -- is it your opinion that his 4 demographic is not sufficiently representative of 5 potential Match.com subscribers such that it renders 6 the analysis unreliable?</p> <p>7 A. I mean, I would like to go back and look at 8 those sentences again.</p> <p>9 But if I am remembering correctly -- because I 10 believe it is Appendix C which I relied on rather than 11 paragraph 104 on page 55 because there's not much 12 detail here -- that, yes, I had concerns about the 13 demographics he used in his study and that they were 14 not fully representative of the universe, which was the 15 term he used, of Match.com customers.</p> <p>16 Q. You write on page 13 of your rebuttal report, 17 quote -- and this is about the end of the fifth line 18 down:</p> <p>19 "In short, Ward's study consisted of a 20 group of highly experienced, non-novice, 21 younger Internet users who, as a matter of 22 course, would be highly adept at navigating 23 most online tasks."</p> <p>24 A. Yes, I see that sentence.</p> <p>25 Q. All right. Did you compare the demographic of</p> <p style="text-align: right;">Page 114</p>	<p>1 A. I would not apply such a uniform descriptor to 2 everyone 50 and older.</p> <p>3 50 is a broad range. You know, I don't know 4 how old Match's oldest customers are. I believe I saw 5 in the customer complaint that at least somebody who 6 claimed to be near or at 80 years old.</p> <p>7 So, clearly, it goes much higher than 50; 8 50 being the new 40. But --</p> <p>9 Q. 60 is the new 40. Stop it.</p> <p>10 A. Anyway, I was relying on their public stats 11 again. I hadn't seen any other demographic stats to 12 that point.</p> <p>13 Q. Right. But my point is, you're not opining 14 that computer users who are 50 and older are 15 non-novice, right, as a general matter?</p> <p>16 A. Right. The novice -- the novice piece in here 17 is specifically referring to the, I believe, 18 self-ratings of his study participants.</p> <p>19 Q. And you wouldn't -- right.</p> <p>20 And you wouldn't say, though, that individuals 21 who are 50 and older are not highly adept at navigating 22 online tasks, as a general matter. Correct?</p> <p>23 MR. AIJAZ: Objection. Form.</p> <p>24 THE WITNESS: Again, I would break it down 25 more precisely than just saying "everybody over 50."</p> <p style="text-align: right;">Page 116</p>
<p>1 the survey respondents or the usability test 2 participants -- did you compare their age demographics 3 with actual Match.com demographics?</p> <p>4 A. I -- yes. I mean, I compared it to the 5 Match.com demographics as Match themselves reported 6 publicly on their website. That was the only source I 7 had at the time.</p> <p>8 Q. Can you describe that demographic?</p> <p>9 A. Okay. So I think I quote it here.</p> <p>10 Q. "Here" is where?</p> <p>11 A. Sorry. I'm getting there. The bottom of 12 page 13.</p> <p>13 According to Match's own company profile, over 14 30 -- sorry, 37 percent of current users are over 15 age -- are aged 50-plus, and the 50-plus age group is 16 Match's -- Match.com's fastest-growing demographic.</p> <p>17 The web page I cite has, I believe, a more 18 detailed breakdown, but I didn't replicate that table 19 in here.</p> <p>20 Q. Is it your opinion that the 50-plus age group 21 is not, in general, online-experienced?</p> <p>22 MR. AIJAZ: Objection. Vague.</p> <p>23 THE WITNESS: Seeing as I'm age 50 --</p> <p>24 BY MR. HUMMEL:</p> <p>25 Q. I'm 60. Pretty good.</p> <p style="text-align: right;">Page 115</p>	<p>1 I mean, once you cross 65, 70, I think it can 2 really vary.</p> <p>3 BY MR. HUMMEL:</p> <p>4 Q. What is the standard test for evaluating 5 whether a universe of survey or usability study 6 participants replicates the universe of likely 7 real-world participants on the tested subject?</p> <p>8 Do you know?</p> <p>9 MR. AIJAZ: Objection. Foundation.</p> <p>10 THE WITNESS: I mean, I think that's -- it 11 depends on your survey design and your -- or study 12 design, and it depends on the context of what you're 13 doing.</p> <p>14 So, I mean, that's really up to the survey 15 designer, but it has to be defensible.</p> <p>16 BY MR. HUMMEL:</p> <p>17 Q. Okay. And what does "defensible" mean?</p> <p>18 A. I mean, well, again, I am trained to produce 19 peer-reviewed research. So if I'm doing it, then it 20 has to be something at a standard that I could submit 21 it to a journal or a conference that is peer-reviewed; 22 that others who are expert in the field would then say, 23 "You know, we agree with your criteria. You've 24 defended it or cited it" or whatever it might be. 25 "You've made the case that it's appropriate."</p> <p style="text-align: right;">Page 117</p>

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<p>1 here because this is the only option I have on this 2 page that include the word "cancel," even though it is 3 bundled with another task. 4 Q. Which is "change"? 5 A. Which is "change." 6 Q. So you can't definitively say without looking 7 at data how many people who click on "Change/cancel 8 subscription" actually intend to cancel? 9 A. How many people. No. I cannot tell you 10 exactly how many people at this point. 11 Q. Okay. What you can ascertain, though, is once 12 you get past the password page, there's a page that has 13 the option "Subscription status" or "Cancel 14 subscription." 15 Isn't it true that you can't know for sure 16 that a person is at least going into the cancellation 17 flow once they -- once they click that link "Cancel 18 subscription"? 19 And even for those people who cancel that, 20 some percentage might be just looking for a save option 21 because they know it's there. Somebody's told them 22 it's there. Right? 23 A. Okay. 24 Q. They get a better deal. 25 (The reporter requested that people not speak Page 134</p>	<p>1 MR. AIJAZ: No foundation. 2 THE WITNESS: How would you know that existed 3 there? How would a consumer know that that was behind 4 that link? Where would you find that information? 5 BY MR. HUMMEL: 6 Q. Word of mouth? 7 You can look skeptically if you want, but it's 8 true. 9 A. To the point where -- 10 MR. AIJAZ: There's no pending question. 11 BY MR. HUMMEL: 12 Q. Are you testifying that once -- is it your 13 opinion that once a consumer clicks on the "Cancel 14 subscription" button, that they -- 100 percent of those 15 people intend to actually cancel their subscription? 16 MR. AIJAZ: Objection. Scope. 17 THE WITNESS: If you get to this page and you 18 want to cancel -- I mean, it would be highly likely 19 that you have elected to go down this path. There are 20 few other options here. 21 You know, 100 percent of all consumers that 22 get to this page? Maybe not. 23 Maybe there are some who have come here by 24 accident. They're clicking "Subscription status." 25 They could be just confused and not sure where they Page 136</p>
<p>1 at once.) 2 MR. AIJAZ: I think you were going to 3 rephrase. Right? 4 BY MR. HUMMEL: 5 Q. Isn't it true that even when you get to page 3 6 of Exhibit 5 -- 7 A. There's no page numbers. 8 Q. It's the third page in Exhibit 5 -- 9 A. Okay. 10 Q. -- which is the -- presents consumers with a 11 choice of subscription status or cancel subscription. 12 Isn't it true that there is even a population 13 of consumers who would click "Cancel subscription" who 14 might not actually intend to cancel? 15 MR. AIJAZ: Objection. Calls for speculation. 16 No foundation. 17 THE WITNESS: Right. I -- what -- why would I 18 speculate that? 19 BY MR. HUMMEL: 20 Q. It's not speculation. 21 There are some consumers who click "Cancel 22 subscription," are there not, who intend to accept a 23 save offer? 24 MR. AIJAZ: Objection. 25 THE WITNESS: How would you know -- Page 135</p>	<p>1 are. I mean, there are multiple possibilities. 2 BY MR. HUMMEL: 3 Q. Okay. So my question is this: Isn't it true 4 that the only way to actually accurately measure 5 consumers who intend to cancel, whether they can find 6 the icon and then proceed to successfully complete the 7 task, is to do a usability study? 8 MR. AIJAZ: Objection. Calls for speculation. 9 Incomplete hypothetical. 10 THE WITNESS: Can you please read that back? 11 (Record read as follows: 12 "QUESTION: Okay. So my question is this: 13 Isn't it true that the only way to actually 14 accurately measure consumers who intend to 15 cancel, whether they can find the icon and 16 then proceed to successfully complete the 17 task, is to do a usability study?") 18 MR. AIJAZ: Same objection. 19 THE WITNESS: No, I don't think that is the 20 only way. 21 BY MR. HUMMEL: 22 Q. Can you please, in your expert opinion, give 23 me another way? 24 MR. AIJAZ: Objection. Scope. 25 THE WITNESS: To some extent, you might be Page 137</p>

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<p>1 able to gauge this through observation.</p> <p>2 BY MR. HUMMEL:</p> <p>3 Q. What does that mean?</p> <p>4 A. I mean through observing through data.</p> <p>5 Q. What data?</p> <p>6 If -- let me just posit this, and then we'll</p> <p>7 take a lunch break.</p> <p>8 If you can't discern that a consumer wants to</p> <p>9 cancel when they click the icon and you can't discern</p> <p>10 that a consumer wants to cancel when they enter their</p> <p>11 password and you can't discern that a consumer wants to</p> <p>12 cancel, necessarily, 100 percent when they cancel --</p> <p>13 when they click "Cancel subscription" on the next page,</p> <p>14 how -- what data would you look at to find out a</p> <p>15 consumer who intends to cancel can actually complete</p> <p>16 it?</p> <p>17 MR. AIJAZ: Objection. No foundation, and</p> <p>18 it's an incomplete hypothetical.</p> <p>19 THE WITNESS: To the extent that you can track</p> <p>20 user journeys through the interface, through</p> <p>21 clickstream data, I am presuming, if that's -- I'm not</p> <p>22 sure that's the right description -- then that would</p> <p>23 give you at least some perception or some understanding</p> <p>24 of the people who go from place to place to place in</p> <p>25 terms of trying to understand successfully how people</p> <p style="text-align: right;">Page 138</p>	<p>1 in the Sentinel database?</p> <p>2 A. So, as I understand it, Sentinel is a large</p> <p>3 database that gets complaints from multiple sources. I</p> <p>4 don't know if they're all government sources, but I</p> <p>5 do -- it's my understanding that, in addition, people</p> <p>6 who submit complaints to the FTC. They may also come</p> <p>7 from states' attorney generals.</p> <p>8 I don't recall right now if they come from the</p> <p>9 BBB, for example, but they may.</p> <p>10 But I know it's a -- it's a catchall for a lot</p> <p>11 of different sources.</p> <p>12 Q. It's a repository of complaints.</p> <p>13 A. Fair enough, yeah.</p> <p>14 Q. How did you go about selecting the complaints</p> <p>15 that you reviewed from the Sentinel database?</p> <p>16 A. So we were provided with a file that, off the</p> <p>17 top of my head, I don't remember how many thousands</p> <p>18 were in there, but multiple thousands.</p> <p>19 And -- hold on. I want to find that page in</p> <p>20 my report really quick to go through the process.</p> <p>21 Q. So the "FTC Complaints" section of your</p> <p>22 rebuttal start at page 38.</p> <p>23 A. Thank you. Right.</p> <p>24 So based on my review of the Match complaints,</p> <p>25 I put the text of those complaints through a program</p> <p style="text-align: right;">Page 140</p>
<p>1 work through the flow.</p> <p>2 BY MR. HUMMEL:</p> <p>3 Q. And in conducting your initial analysis, you</p> <p>4 did no such analysis of click-through data. Correct?</p> <p>5 A. I did not look at click-through data.</p> <p>6 MR. HUMMEL: Okay. Let's take our lunch</p> <p>7 break.</p> <p>8 MR. AIJAZ: All right.</p> <p>9 (Lunch recess from 12:00 to 1:03 P.M.)</p> <p>10 --o0o--</p> <p>11 AFTERNOON SESSION</p> <p>12 MR. HUMMEL: Let's go back on the record.</p> <p>13 Q. Dr. King, you understand you're still under</p> <p>14 oath?</p> <p>15 A. Yes.</p> <p>16 Q. Any reason you can't continue to give full and</p> <p>17 complete and accurate testimony?</p> <p>18 A. No.</p> <p>19 Q. In your rebuttal report, you undertook an</p> <p>20 analysis of purported complaints. Right?</p> <p>21 A. Yes.</p> <p>22 Q. One of the sources of the complaints was the</p> <p>23 FTC's Sentinel database. Correct?</p> <p>24 A. Correct.</p> <p>25 Q. What's your understanding of what's contained</p> <p style="text-align: right;">Page 139</p>	<p>1 that demonstrated to me what were the most frequently</p> <p>2 used keywords people discussed in those complaints, and</p> <p>3 that's what you see on page 38.</p> <p>4 So the most popular keywords that we looked at</p> <p>5 were things like "confusing," "misleading," "auto</p> <p>6 renewal."</p> <p>7 So, then, we took those words and searched</p> <p>8 the -- the file of complaints that we had.</p> <p>9 And, as Mr. Langenfeld's report notes, the --</p> <p>10 the file that I provided in my opinions to my rebuttal</p> <p>11 had two extra complaints in it that weren't focused on</p> <p>12 Match that I missed in terms of my copy -- I'm actually</p> <p>13 in the process of verifying -- I'm concerned I copied</p> <p>14 the wrong table out of my file. So I'm in the process</p> <p>15 of verifying that. But I realize it contained two that</p> <p>16 did not deal with Match.com directly.</p> <p>17 But those were not referenced in this analysis</p> <p>18 in my report. I think it was a copy/paste error.</p> <p>19 Q. Are the 30 FTC complaints listed in your</p> <p>20 Appendix A the only complaints you reviewed from the</p> <p>21 Sentinel database?</p> <p>22 A. Well, and that's the other piece I'm trying</p> <p>23 to --</p> <p>24 When I put together the appendix, I think I</p> <p>25 copied the wrong field because I know in here I note</p> <p style="text-align: right;">Page 141</p>

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<p>1 that I said I reviewed roughly 50, and then there were</p> <p>2 66 that had the word "deceptive."</p> <p>3 So I'm going back and just double-checking,</p> <p>4 and I will absolutely reshare the correct list on</p> <p>5 Friday. I'm working with one of my assistants to</p> <p>6 verify that.</p> <p>7 Q. So if you determine that there is another</p> <p>8 Appendix A that you're going to utilize in this matter,</p> <p>9 you'll provide that to --</p> <p>10 A. Absolutely.</p> <p>11 Q. -- us?</p> <p>12 A. And my apologies for that inconsistency.</p> <p>13 Q. So your report says you reviewed roughly 50</p> <p>14 complaints. Is that true?</p> <p>15 A. Like I said, I have to go back and look at the</p> <p>16 number. It's somewhere -- when we did the search, we</p> <p>17 came up with somewhere in the neighborhood of 50 to 60.</p> <p>18 Q. Did you, when you were reviewing these</p> <p>19 complaints, care about what the actual experience was</p> <p>20 of the complaining consumer on the Match.com</p> <p>21 cancellation flow?</p> <p>22 MR. AIJAZ: Objection. Vague.</p> <p>23 THE WITNESS: I'm not -- you mean in what</p> <p>24 sense? I'm sorry.</p> <p>25</p> <p style="text-align: right;">Page 142</p>	<p>1 into Sentinel or Match directly, you know, seeking help</p> <p>2 because they could not find the complaint flow -- I'm</p> <p>3 sorry, not the complaint flow, the cancellation flow.</p> <p>4 So in some cases, those are people who are</p> <p>5 literally, like, complaining because they couldn't even</p> <p>6 figure out how to do it.</p> <p>7 BY MR. HUMMEL:</p> <p>8 Q. How many --</p> <p>9 A. So they may have not entered the flow because</p> <p>10 the whole point of writing was to get assistance or to</p> <p>11 basically complain that they were unable to even do it.</p> <p>12 Q. Did you account for the possibility that a</p> <p>13 consumer might be calling customer service at Match</p> <p>14 because they saw a charge on their credit card</p> <p>15 statement or they saw a charge and, in fact, they never</p> <p>16 tried to cancel; but in calling Match, they said, "I'm</p> <p>17 having a problem with cancelling," and they want a</p> <p>18 refund.</p> <p>19 Did you take that into account?</p> <p>20 MR. AIJAZ: Objection. Form.</p> <p>21 THE WITNESS: Not specifically. I mean,</p> <p>22 that -- anything is possible, but that seems like a</p> <p>23 rather -- a small edge case.</p> <p>24 BY MR. HUMMEL:</p> <p>25 Q. Did you take into account the number of</p> <p style="text-align: right;">Page 144</p>
<p>1 BY MR. HUMMEL:</p> <p>2 Q. Did they actually enter the flow?</p> <p>3 A. Ah. I mean I did not exclude them if the</p> <p>4 complaint didn't somehow contain the words, you know,</p> <p>5 "I was in the flow" or something similar to that.</p> <p>6 So, no, I didn't exclude them on that basis.</p> <p>7 Q. So what's the value to you of a consumer who</p> <p>8 submits that complaint about the flow but who</p> <p>9 demonstrably never entered the flow?</p> <p>10 MR. AIJAZ: Objection. Foundation.</p> <p>11 THE WITNESS: Well, again, it's not that they</p> <p>12 demonstrably never entered. They may have just written</p> <p>13 a complaint and not mentioned that specific fact in the</p> <p>14 complaint.</p> <p>15 BY MR. HUMMEL:</p> <p>16 Q. But you know that based on -- well, you know,</p> <p>17 based on Mr. Langenfeld's report, that there are</p> <p>18 certain consumers who submitted complaints who you can</p> <p>19 tell never entered the flow.</p> <p>20 Do you care about that?</p> <p>21 MR. AIJAZ: Objection. Foundation.</p> <p>22 THE WITNESS: I mean in some -- I'm sorry --</p> <p>23 okay.</p> <p>24 In some cases, people are writing whether</p> <p>25 it's -- you know, one of the many sources that feed</p> <p style="text-align: right;">Page 143</p>	<p>1 consumers who complained who did receive a refund?</p> <p>2 A. No, I didn't.</p> <p>3 Q. Did you take into account the number of</p> <p>4 consumers who complained who actually successfully</p> <p>5 completed the flow and cancelled?</p> <p>6 MR. AIJAZ: Objection. Foundation.</p> <p>7 THE WITNESS: Sorry. Who completed the flow</p> <p>8 and cancelled?</p> <p>9 BY MR. HUMMEL:</p> <p>10 Q. Yes.</p> <p>11 A. But who were still complaining?</p> <p>12 Q. Yes.</p> <p>13 A. I don't see why that would moderate my review</p> <p>14 of the complaints.</p> <p>15 They may still be -- I mean, it may have taken</p> <p>16 them five times, for example, to complete the flow, and</p> <p>17 that may be what they're complaining about.</p> <p>18 Q. Right. And that's a hypothetical.</p> <p>19 Did you analyze that?</p> <p>20 Did you analyze the percentage of consumers</p> <p>21 who complained, as of the time you did this rebuttal</p> <p>22 report, who actually had completed the flow?</p> <p>23 MR. AIJAZ: Objection. Form.</p> <p>24 THE WITNESS: I'm sorry, did I analyze that in</p> <p>25 terms of the complaint text itself and make that</p> <p style="text-align: right;">Page 145</p>



<p>1 determination, or through other data?</p> <p>2 I'm not sure I understand.</p> <p>3 BY MR. HUMMEL:</p> <p>4 Q. Well, let's be clear.</p> <p>5 You only analyzed the text of a complaint in</p> <p>6 arriving at your conclusions that you put in the</p> <p>7 rebuttal report. Correct?</p> <p>8 MR. AIJAZ: Objection. Form.</p> <p>9 THE WITNESS: I looked at the complaints</p> <p>10 independent of any other data.</p> <p>11 BY MR. HUMMEL:</p> <p>12 Q. And you made no attempt to survey --</p> <p>13 Well, could I have that answer read back,</p> <p>14 please?</p> <p>15 (Record read as follows:</p> <p>16 "THE WITNESS: I looked at the complaints</p> <p>17 independent of any other data.")</p> <p>18 BY MR. HUMMEL:</p> <p>19 Q. Okay. And you made no attempt to survey</p> <p>20 Match.com subscribers who did not complain and who</p> <p>21 successfully cancelled to ascertain what their</p> <p>22 experience was on the -- in the cancellation flow.</p> <p>23 Correct?</p> <p>24 A. I did not survey successful -- subscribers who</p> <p>25 successfully cancelled.</p> <p style="text-align: right;">Page 146</p>	<p>1 A. I don't know if it would be very exciting.</p> <p>2 Q. So the dark patterns, that, I can tell you</p> <p>3 identified as -- as of concern to you in this case;</p> <p>4 first, what has been described colorfully in some of</p> <p>5 the literature as the "Roach Motel."</p> <p>6 What is the actual dark pattern that is the --</p> <p>7 the Roach Motel?</p> <p>8 Is it obstruction?</p> <p>9 A. It is classified as obstruction. I mean,</p> <p>10 there are several different ways of classifying these</p> <p>11 things. So I'm referring to Harry Brignull's</p> <p>12 classification primarily here.</p> <p>13 Yeah, and that is the -- you know, the classic</p> <p>14 Roach Motel commercial: the roaches come in; they can't</p> <p>15 get out. The idea is that it's easy to come in, but it</p> <p>16 is difficult to leave.</p> <p>17 Q. It's also the Hotel California.</p> <p>18 A. Right.</p> <p>19 Q. Let's petition to change the name from Roach</p> <p>20 Motel to Hotel California.</p> <p>21 A. I -- I know Harry. I can ask him.</p> <p>22 Q. Regardless, the idea here is it's easy to get</p> <p>23 in but not to get out.</p> <p>24 A. Fundamentally, yes.</p> <p>25 Q. In other words, you can check out any time you</p> <p style="text-align: right;">Page 148</p>
<p>1 That's what you're asking?</p> <p>2 Q. And who did not complain?</p> <p>3 A. And who did not complain?</p> <p>4 No. I did not survey anybody who fits that</p> <p>5 description.</p> <p>6 Q. So 99 percent of consumers, you didn't survey</p> <p>7 about their experience on the cancellation flow?</p> <p>8 MR. AIJAZ: Objection. Foundation.</p> <p>9 BY MR. HUMMEL:</p> <p>10 Q. More than 99 percent?</p> <p>11 MR. AIJAZ: Objection. Foundation.</p> <p>12 THE WITNESS: I don't know about the</p> <p>13 99 percent number because I feel like I've seen</p> <p>14 multiple numbers floating around in this case. So I</p> <p>15 won't agree to the 99 percent, but I did not survey</p> <p>16 people who successfully cancelled and did not complain.</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q. Whatever the percentage is. Correct?</p> <p>19 MR. AIJAZ: Can you ask the question?</p> <p>20 BY MR. HUMMEL:</p> <p>21 Q. You didn't survey them, regardless of what the</p> <p>22 percentage of those consumers were. Correct?</p> <p>23 A. Right. Correct.</p> <p>24 Q. Okay. Let's talk about dark patterns.</p> <p>25 Ought to be a movie.</p> <p style="text-align: right;">Page 147</p>	<p>1 like, but you can never leave, right, that's the</p> <p>2 concept?</p> <p>3 A. Fair enough.</p> <p>4 Q. So my question is: How can you have an</p> <p>5 opinion about the obstruction dark pattern when you</p> <p>6 didn't assess the relative difficulty of subscribing</p> <p>7 versus cancelling?</p> <p>8 A. Primarily because nothing in this case was</p> <p>9 surfaced to me that people were upset or complaining</p> <p>10 about the subscription process.</p> <p>11 Q. But the test for simplicity that the FTC</p> <p>12 itself has promulgated -- the only guidance is that it</p> <p>13 has to be at least as simple to cancel as it was to</p> <p>14 initiate the charge.</p> <p>15 MR. AIJAZ: Objection. Foundation. Misstates</p> <p>16 exhibits.</p> <p>17 BY MR. HUMMEL:</p> <p>18 Q. So the --</p> <p>19 A. Okay.</p> <p>20 Q. In light of that, I have a question, which is:</p> <p>21 With that guidance in mind, A, you didn't evaluate</p> <p>22 that, as you previously testified. Right?</p> <p>23 A. I did not evaluate the sign-up -- any portion</p> <p>24 of the sign-up process.</p> <p>25 Q. So how can you evaluate the, quote,</p> <p style="text-align: right;">Page 149</p>

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<p>1 "obstruction dark pattern" without having done that 2 analysis? 3 A. I am taking the FTC's complaint at its word 4 that they did not object to the -- the sign-up process. 5 Q. But that's not the issue. 6 The issue is not whether people object to the 7 sign-up process; it's the relative simplicity of 8 sign-up versus cancellation that is the issue. 9 Correct? 10 And even in your Roach Motel example, it's -- 11 people can get in -- can get in easily, but they can't 12 leave. 13 So you didn't evaluate the first part, which 14 is can they get in easily? 15 A. I didn't evaluate that, but that is something 16 that came up in at least one of the complaints that I 17 reviewed; that somebody specifically argued, "You made 18 it easy for me to sign up, and you made it really hard 19 for me to leave." 20 Q. One person said that. 21 A. At least one -- 22 Q. Okay. 23 A. -- from memory. 24 We could probably find more if we went through 25 the file.</p> <p style="text-align: right;">Page 150</p>	<p>1 most likely assume that it is something they must 2 complete in order to move it forward. 3 Q. Do you recall that Mr. Ward analyzed other 4 cancellation flows from other well-known subscription 5 services in his report? 6 MR. AIJAZ: Objection. Foundation. 7 THE WITNESS: I cited them. I don't recall 8 him providing a deep analysis of them. 9 BY MR. HUMMEL: 10 Q. All right. 11 Well, he was evaluating whether they had 12 characteristics that were similar or not similar to the 13 Match.com cancellation flow in the context of 14 describing an industry standard for cancellation flows. 15 Do you recall him doing that? 16 MR. AIJAZ: Object to foundation. 17 THE WITNESS: I recall that he discusses -- I 18 don't remember how many -- something like six or 19 seven -- but, you know, I -- where is his report? 20 Sorry. There are so many things in front of 21 me. 22 This one? 23 Let me turn to that page -- 24 BY MR. HUMMEL: 25 Q. Sure.</p> <p style="text-align: right;">Page 152</p>
<p>1 Q. Okay. But at least you know of one out of 2 millions of users. Right? 3 MR. AIJAZ: Objection. Foundation. 4 THE WITNESS: One out of the -- the sample 5 that I reviewed. 6 BY MR. HUMMEL: 7 Q. Out of the complainants. 8 A. Yes. 9 Q. Now the second dark pattern I want to ask you 10 about is called "Forced action." 11 Can you describe forced action for me? 12 A. Well, let me see what definition -- yes. I 13 believe that's -- 14 Let me just read from the report: 15 "Forced action is the practice of 16 requiring the user to perform a certain action 17 to access or continue to access certain 18 functionality." 19 Q. So that would include, for example, the 20 password, entering a password. 21 A. Yeah. I mean, yes, I included that in my 22 analysis. 23 Q. And considering a survey? 24 A. Well, again, if somebody approaches the survey 25 and cannot tell that it is optional, then they will</p> <p style="text-align: right;">Page 151</p>	<p>1 A. -- so I can just follow along, which is -- 2 Where's the table of contents? 3 Q. Look at page 31, if you could. 4 A. Ah, thank you. 5 There you go. Got, what, ten? 6 Q. So we looked at ten online subscription 7 services and compared their cancellation policies. 8 Do you see that? 9 A. Yes. I'm on page 31. 10 Q. Right. So here's my question about this: 11 Do you see any potential value in a company 12 having a cancellation flow that is consistent with 13 industry standard? 14 MR. AIJAZ: Objection. Vague. 15 THE WITNESS: It depends on the industry 16 standard. 17 BY MR. HUMMEL: 18 Q. My question doesn't -- are you saying you 19 can't answer the question unless you know what the 20 industry standard is? 21 A. To some extent. 22 And the reason why I say that is that, you 23 know, one of the things we see in the dark pattern 24 space is a proliferation of dark patterns across, you 25 know, many different players that we didn't see in the</p> <p style="text-align: right;">Page 153</p>

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<p>1 the password and the fact that a consumer is presented 2 with a survey. Right?</p> <p>3 A. Well, the fact that the consumers were 4 presented with survey questions that were not clearly 5 marked as optional, yes.</p> <p>6 Q. Why does it matter to you if they were clearly 7 marked as optional?</p> <p>8 A. Because the insertion of the survey questions 9 in the flow made it much longer than I would argue it 10 needed to be in order to effectively cancel your 11 account.</p> <p>12 Q. How much longer?</p> <p>13 A. How much longer? Well, multiple steps.</p> <p>14 You know, if you look at -- if you look at the 15 end of my report where we compare the steps in the 16 Match flow across the years with other dating sites, 17 you know, in general, the Match flow is at least three 18 to four steps longer.</p> <p>19 Q. But you don't quantify the actual time it 20 takes to complete those steps where it's not clearly -- 21 according to you, clearly labeled as optional. Right?</p> <p>22 A. I don't quantify the time because I think time 23 is not the most important factor here.</p> <p>24 You have a broad range of users. If someone 25 is 80 years old and just moves very slowly but can</p> <p style="text-align: right;">Page 162</p>	<p>1 A. Yes.</p> <p>2 Q. Okay. Now, you also say that there's a dark 3 pattern involving, quote, "confusing terminology." 4 What confusing terminology are you 5 referencing?</p> <p>6 A. What page are you looking at?</p> <p>7 I just had it, I think. This is in the 8 "Content Strategy" section.</p> <p>9 Q. It's in the "Dark Pattern" section?</p> <p>10 A. Is that -- are you on page 45?</p> <p>11 Q. I'm not on a page, but I will be.</p> <p>12 A. Okay.</p> <p>13 Q. So "Obstruction" is on page 40.</p> <p>14 A. Yeah.</p> <p>15 Q. Forced action, we talked about. 16 Hidden information we talked about on page 43. 17 Then there is one called "Content Strategy." 18 I'm skipping that for a moment.</p> <p>19 A. Okay.</p> <p>20 Q. And then I'm going to "Inconsistent Language," 21 which, in the dark pattern research, is often, I think, 22 referred to as "confusing terminology."</p> <p>23 But maybe you think I'm --</p> <p>24 A. No, I -- that's -- I believe that's correct.</p> <p>25 Q. So you -- you think those are synonymous:</p> <p style="text-align: right;">Page 164</p>
<p>1 effectively cancel, then, to me, if she took 45 minutes 2 to do it, like, that doesn't necessarily -- the 3 timepiece -- you know, it can be one factor you can 4 consider, but there are lots of contexts in which it's 5 not determinative. It shouldn't be the only factor you 6 consider.</p> <p>7 Q. In this context, what you just described, you 8 are combining or conflating forced action with hidden 9 information.</p> <p>10 MR. AIJAZ: Objection. Misstates the 11 testimony.</p> <p>12 THE WITNESS: What are you referring to 13 specifically?</p> <p>14 BY MR. HUMMEL:</p> <p>15 Q. Well, one specific dark pattern that you 16 reference is called "hidden information."</p> <p>17 A. Right. Yes.</p> <p>18 Q. Right.</p> <p>19 And in the context of the survey, what you're 20 saying is it is a -- it is a -- not actually a forced 21 action; they don't actually have to do it, but the 22 information that it is optional is hidden.</p> <p>23 Is that accurate?</p> <p>24 A. The two compound each other.</p> <p>25 Q. That's what I mean.</p> <p style="text-align: right;">Page 163</p>	<p>1 Inconsistent language and confusing terminology?</p> <p>2 A. Again, there are multiple ways that we 3 describe dark patterns, so it depends, kind of, on 4 whose list you're working off of.</p> <p>5 Q. So you write on page 346 at the top, under the 6 "Inconsistent Language" heading: 7 "As mentioned earlier throughout this 8 report, consistency is not only a good tenet 9 of good design, it is a practice taught to 10 designers, technologists, and product 11 managers."</p> <p>12 Do you see that?</p> <p>13 A. Uh-huh.</p> <p>14 Q. What does "consistency" mean?</p> <p>15 A. I mean, in this context, it means using the 16 same language or a consistent set of descriptors to 17 describe, you know, a particular thing.</p> <p>18 Q. Okay. What in the Match.com cancellation flow 19 uses inconsistent language that would cause consumers 20 not to be able to cancel?</p> <p>21 A. Okay. Let me get the exhibits in front of me.</p> <p>22 So, primarily, my focus is on the offer we 23 find at the offer page.</p> <p>24 I'm on Exhibit 5, the 2016 flows.</p> <p>25 Q. This is the "Save Offer" page?</p> <p style="text-align: right;">Page 165</p>



<p>1 A. Yes. You know, on that page, my concern was</p> <p>2 specifically the -- the use of the word "resign" rather</p> <p>3 than "cancel."</p> <p>4 I understand, or at least from what I can tell</p> <p>5 from the documents I reviewed internally, the company</p> <p>6 calls it "resignation."</p> <p>7 But it's unclear to me that that's how most</p> <p>8 consumers would consider it, and certainly the concept</p> <p>9 of resignation is not being reflected in the account</p> <p>10 settings options.</p> <p>11 You weren't ever presented with an option to</p> <p>12 resign; you were asked to cancel your membership.</p> <p>13 And on this page in particular, you've got</p> <p>14 inconsistencies here.</p> <p>15 Q. So you just used a phrase, "how a consumer</p> <p>16 would consider it."</p> <p>17 A. Uh-huh.</p> <p>18 Q. Do you recall using that phrase?</p> <p>19 A. Maybe we could read it back.</p> <p>20 Q. Well, assume you used that phrase.</p> <p>21 Isn't it true that, in order to ascertain what</p> <p>22 a consumer does or does not perceive or understand</p> <p>23 based on seeing certain text, isn't it true that in</p> <p>24 order to ascertain that, you have to do a consumer</p> <p>25 perception study?</p> <p style="text-align: right;">Page 166</p>	<p>1 A. No, I have not.</p> <p>2 Q. Any other inconsistent language that you would</p> <p>3 point to in the Match.com cancellation flow that you</p> <p>4 can believe is inconsistent?</p> <p>5 A. Some of my concerns were around the switching</p> <p>6 off of phrases in the buttons: "Continue" versus</p> <p>7 "continue cancellation," for example. That's on</p> <p>8 page 47.</p> <p>9 You know, again, some of the -- some of my</p> <p>10 concerns here were also around the shift in language</p> <p>11 between the "Save Offer" page and the pages preceding</p> <p>12 it and following it that, again, it just -- it's</p> <p>13 disjointed.</p> <p>14 You know, it -- from the flow from one page to</p> <p>15 another, that it adds a disruption when it kind of</p> <p>16 switches language in the middle of the flow.</p> <p>17 Q. Dr. King, do you believe that it's appropriate</p> <p>18 for a company that has an online cancellation flow to</p> <p>19 design the flow in a way that reduces churn?</p> <p>20 MR. AIJAZ: Objection. Vague. Calls for</p> <p>21 legal analysis. And lack of foundation.</p> <p>22 THE WITNESS: What definition of "churn" are</p> <p>23 we using?</p> <p>24 BY MR. HUMMEL:</p> <p>25 Q. Losing customers.</p> <p style="text-align: right;">Page 168</p>
<p>1 MR. AIJAZ: Objection. Form. Foundation.</p> <p>2 BY MR. HUMMEL:</p> <p>3 Q. Otherwise, it's just ipse dixit of somebody</p> <p>4 who does a facial review.</p> <p>5 A. I don't -- I mean, I think you can look at the</p> <p>6 common -- the common definitions of particular words.</p> <p>7 This is not a -- this is not a technical term.</p> <p>8 So, you know, if you're using the word "resigned"</p> <p>9 versus the word "cancel," I would refer to the</p> <p>10 dictionary definition of those terms. I mean, I think</p> <p>11 that's a fairly reliable, popular notion --</p> <p>12 Q. So --</p> <p>13 A. -- or popular understanding.</p> <p>14 Q. So your point is, by using two different</p> <p>15 terms, "cancellation" and "resignation," that's</p> <p>16 confusing to consumers, in your view?</p> <p>17 A. On this page, that was my concern.</p> <p>18 Q. But you've done no empirical testing to</p> <p>19 ascertain whether, in fact, consumers are confused by</p> <p>20 that terminology?</p> <p>21 A. I have not done testing in the context of this</p> <p>22 case to test that particular piece.</p> <p>23 Q. Have you attempted to ascertain how many</p> <p>24 consumers failed to cancel as a result of that alleged</p> <p>25 confusion as a percentage of people who enter the flow?</p> <p style="text-align: right;">Page 167</p>	<p>1 A. Losing customers. Okay.</p> <p>2 If -- as long as it's not deceptive or engages</p> <p>3 dark patterns.</p> <p>4 Q. Then that's okay?</p> <p>5 A. Potentially.</p> <p>6 Q. Okay. There's a lot of literature on how to</p> <p>7 design cancellation flows; a lot of publications on how</p> <p>8 to design cancellation flows that serve as guides to</p> <p>9 companies on how to design them and reduce churn.</p> <p>10 Have you read that?</p> <p>11 MR. AIJAZ: Objection. Foundation.</p> <p>12 THE WITNESS: I mean, if you're talking about,</p> <p>13 like, popular marketing literature?</p> <p>14 BY MR. HUMMEL:</p> <p>15 Q. Yes.</p> <p>16 A. I mean, I've seen some of that research -- I</p> <p>17 wouldn't call it "research." I've seen some of that</p> <p>18 content.</p> <p>19 Q. Guidance?</p> <p>20 A. I mean, I've looked at some of it.</p> <p>21 But, in general, if it's not something I feel</p> <p>22 like is going to be reliable in terms of academic</p> <p>23 standards, I'm unlikely to cite it.</p> <p>24 Q. Do you think it's appropriate for companies --</p> <p>25 and this is a sincere question for you, Dr. King -- do</p> <p style="text-align: right;">Page 169</p>

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<p>1 you think it's appropriate for companies to focus in 2 their cancellation flow itself on attempting to 3 convince customers to stay on the website? 4 MR. AIJAZ: Objection. Vague. Calls for 5 legal analysis. 6 THE WITNESS: So I don't object -- and if you 7 look at the -- I mean, I believe I talk about this 8 toward the end of my report when I'm doing the 9 comparison. 10 Like, I don't -- I don't have an objection to 11 the -- to the idea or the practice of offering people, 12 essentially, a coupon or an offer. Like, I don't 13 have -- there's no philosophical objection here. It's 14 just how it is implemented that is my concern. 15 BY MR. HUMMEL: 16 Q. And what about the way it's implemented on the 17 Match.com cancellation flow is objectionable? 18 A. It's -- you know, it's the larger context of 19 the whole flow. I mean, do we want to -- I can go 20 through my report, and we can go through this whole 21 session. 22 Q. No. I just want to know -- if you don't mind, 23 I just want to know specifically what you think about 24 the implementation in this specific case of the -- of 25 the save offer that makes it objectionable to you.</p> <p style="text-align: right;">Page 170</p>	<p>1 I mean, there's ways we can parcel this out to 2 try to figure out kind of, you know, what would be more 3 optimal, but it's not the fact of the offer. It's more 4 of -- again, it's the placement in relation to the 5 survey questions. 6 In the 2016 flow, it's the use of the 7 terminology. It's the lack of a -- you know, a title 8 on this page. It's -- there are many -- I have many 9 criticisms of it, but they are often in relation to 10 other things. It is not simply the fact that a save 11 offer was included. 12 Q. And the FTC's public guidance on save offers 13 is that they're acceptable so long as they don't cause 14 unreasonable delay. Right? 15 A. I believe so. 16 I mean, again, I would need to see that to 17 be -- 18 Q. So in what way does the save offer as 19 presented in the Match.com cancellation flows that you 20 analyzed -- in what way does it cause unreasonable 21 delay? 22 A. My question -- I mean, my concern here was not 23 that it was delaying customers. 24 Q. Okay. 25 A. My concern here was that people got to this</p> <p style="text-align: right;">Page 172</p>
<p>1 Is it where it is in the flow? Is it the way 2 it's depicted on the page? 3 I mean, what is it? 4 A. So it's not the fact of an offer, like I said. 5 I -- you know, I think that if companies want to try to 6 retain customers and they want to do so in a way 7 that's, again, not manipulative and responsible, then 8 that's fine. 9 And I have seen implementations of this that I 10 would argue badger people, you know, where -- 11 Q. Sure. 12 A. -- you may have to click through multiple 13 screens. You get, like, three or four offers thrown at 14 you. Right? 15 So I think there are some really poor ways 16 that these things are implemented. 17 So, again, it's not the fact of the offer 18 that's the problem, I would argue. 19 You know, my criticism is difficult to isolate 20 just on this screen in relation to the other factors. 21 You know, it's the totality of the flow. 22 I mean, we can get hypothetical. We can talk 23 about, okay, so if you had the offer and no survey 24 questions, like, you know, where does that fall in the 25 scope of things?</p> <p style="text-align: right;">Page 171</p>	<p>1 page and thought that they had already cancelled. 2 Q. And what percentage of consumers who are in 3 the flow thought that? 4 A. We will go back over and over this again. 5 I don't have a -- the data on exactly how many 6 consumers thought that at this point. 7 Q. And just to be clear, and I've asked this a 8 lot, but just to be clear, you haven't -- didn't test 9 that in a usability study? 10 A. I did not test that in a usability study. 11 Q. So there's one more dark pattern I wanted to 12 ask you about -- category of dark pattern -- 13 (Reporter requested clarification.) 14 BY MR. HUMMEL 15 Q. There's one more category of dark patterns 16 that I wanted to ask you about, and that's content 17 strategy. And you write: 18 "The software product design process does 19 not just consist of user research, 20 engineering, or user experience, UX 21 design/graphic design. It also includes 22 content strategy and copyrighting." 23 What is consent strategy? 24 A. Content strategy is the term used for 25 developing content for a website. You know, whether</p> <p style="text-align: right;">Page 173</p>

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<p>1 gear icon has a very particular resonance in 2 communicating configuration, but that may not be 3 universally about configuring aspects of a system that 4 are related to your personal preferences or your 5 personal settings or descriptors. It's much more 6 about, you know, I -- 7 You know, on the iPhone, for example, if you 8 go under "Settings" -- 9 Q. Yep. 10 A. -- you know, it's things like WiFi and 11 Bluetooth. It's device-related settings, for example. 12 Q. But just a minute. If you click on the icon 13 and you see under "Settings" you have -- the first 14 thing is your name, "Apple ID," "iCloud Media," and 15 "Purchases." Right? 16 A. That is now in there. It didn't used to be. 17 Yeah. 18 Q. But it is now? 19 MR. AIJAZ: Objection. Scope. 20 BY MR. HUMMEL: 21 Q. Click on that, and you get to "Subscriptions." 22 And that's the way, through the gear icon, 23 that you access what subscriptions you have and manage 24 them on your iPhone. 25 MR. AIJAZ: Objection. Scope and not -- no Page 178</p>	<p>1 Whether it is as ubiquitous for account settings, I 2 think, is debatable. 3 BY MR. HUMMEL: 4 Q. Or subscription? 5 A. Or subscriptions. 6 Q. What support do you have for the claim that, 7 quote, on page 42 of your report: 8 "Radio buttons are typically presented as 9 an element that must be filled out and 10 selected before moving forward"? 11 A. So radio buttons are a form of interaction 12 design. "Interactions" are selectable elements or 13 things that people can fill in on web pages. And I 14 called this out here because when you are -- 15 Here, let me turn to that page first off. 16 Q. Page 42? 17 A. Well, no. I mean, in the -- I'm going to look 18 at Exhibit 5. 19 Q. Okay. 20 A. The "Before you go" survey page. 21 Is that the first one for surveys? Let me 22 just double-check. 23 Yes. Okay. 24 So is it -- so when you look at this page -- 25 and, again, this is the "Before you go, help us make Page 180</p>
<p>1 foundation. 2 MR. HUMMEL: It's cross-examination. 3 Q. My question is: So even on the iPhone, 4 which is the most ubiquitous form of communication 5 today, except for, you know, Google users -- 6 A. I was going to say no. I don't think it's as 7 ubiquitous as Android. 8 Q. It may or may not be. 9 But, regardless, to get to the subscription 10 management and cancellation of subscriptions, you have 11 to click on the gear icon in the iPhone. 12 You'd agree with that. Right? 13 MR. AIJAZ: Objection. Outside the scope. 14 THE WITNESS: It's certainly a portal for 15 configuring your device. Whether it is as 16 well-understood as the entryway for configuring your 17 personalized settings, I think, could be debated. 18 BY MR. HUMMEL: 19 Q. So you won't agree or disagree with the 20 concept that the gear icon is a well-known indicator 21 for settings. 22 A. Well ... 23 MR. AIJAZ: Objection. Misstates testimony. 24 THE WITNESS: Right. I mean, I would say it 25 is a well-known indicator for device configuration. Page 179</p>	<p>1 Match.com better" page in the 2016 flow that I am 2 looking at. 3 The reason I called those out is that they 4 are -- there are basically two calls to action on this 5 page: The buttons, the blue buttons, and the radio 6 buttons. 7 And, generally, if you are presenting a radio 8 button to somebody, they are requesting to look at that 9 and assume it is something that they must select; 10 particularly, in the context of this page where there 11 are basically only, kind of, three main calls to action 12 here: Click the radio buttons or select one of the two 13 blue buttons. 14 I'll ignore the other elements because that's 15 not really part of primary task flow. 16 Q. Do you agree that the "Continue cancellation" 17 button is clickable even without someone answering the 18 survey question? 19 A. It is my understanding that it was, but I 20 dispute that that is clearly communicated to the user. 21 Q. What is a "breadcrumb"? 22 A. A breadcrumb is a form of subnavigation. 23 Q. What's subnavigation? 24 A. So an example in the Match website, the 25 Match.com logo would be a primary, top-level navigation Page 181</p>

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<p>1 element. You click that on -- anywhere on the site, 2 and it's going to take you back to the home page. 3 So in terms of information architecture of a 4 website, you have the top-level elements that are 5 usually available to you anywhere you go on the 6 website. 7 And then if you click down a level, you will 8 hit, ideally, some level of subnavigation that gives 9 you the range of options available to you at that 10 stage. 11 And then if you go one point lower, some but 12 not all web pages will also implement an even 13 finer-grained level of navigation called "breadcrumbs." 14 Q. Have you -- you say you monitor the Dark 15 Patterns Tip Line? 16 A. Yes. 17 Q. You would agree that there's not a single 18 complaint about Match on that tip line. Correct? 19 A. I don't believe there is, but I -- I have 20 not -- I actually haven't searched the database. 21 So there's many more things that have been 22 reported to the site than what are actually live, so I 23 have not searched that site to see if there was a 24 Match.com complaint, but there could be. 25 I can't say definitively, but I don't believe</p> <p style="text-align: right;">Page 182</p>	<p>1 I cannot remember off the top of my head if 2 Coffee Meets Bagel has a paid option or not. 3 Q. And the cancellation processes you claim to 4 have analyzed in your report were actually deleting 5 accounts, not cancelling a subscription. Correct? 6 A. Let's see. I guess in those contexts, that 7 was because -- well, Facebook Dating in particular, 8 because it's not a paid site for you to withdraw from 9 the dating process, then in that context, yes, it's 10 deleting an account. 11 Q. Let's look at Tab 31. 12 A. I'm sorry? 13 MR. AIJAZ: He's talking about whereby -- 14 THE WITNESS: Oh, I'm sorry. 15 MR. HUMMEL: Let's mark this as next in order, 16 please. 17 (Deposition Exhibit 9 was marked for 18 identification.) 19 BY MR. HUMMEL: 20 Q. Take a minute and review it. I'm going to ask 21 you if this exhibit reflects the flow that you 22 reviewed. 23 A. I'm going to sit here and map it through. 24 Q. Sure. 25 A. (Reviewing document.)</p> <p style="text-align: right;">Page 184</p>
<p>1 there are any published at this point. 2 Q. What is "directness"? 3 A. In what context? 4 Q. Have you heard that phrase, "the website flow 5 should be direct"? 6 A. Potentially. Are you quoting it from my 7 report? 8 Q. No. 9 A. I'm not sure where -- what context that's 10 coming from. 11 Q. You don't know the context? 12 A. Not off the top of my head. 13 I mean, I don't know if you're quoting 14 something. I mean, potentially, but ... 15 Q. What two website cancellation flows did you 16 analyze in connection with your initial report? 17 Do you recall? 18 A. Are you talking about the competitors? 19 Q. Yes. 20 A. Facebook Dating and Coffee Meets Bagel, I 21 believe. 22 Q. Neither of those sites were paid 23 subscriptions. Correct? 24 A. Let me double-check. 25 I mean, Facebook Dating, I believe, is not.</p> <p style="text-align: right;">Page 183</p>	<p>1 So -- let's see. This seems to resemble most 2 closely, on my page 64 and my report Figure 16, the 3 second pathway -- the second example down, Facebook 4 Dating, Skip Survey. This appears to map to each of 5 those steps. 6 Q. Okay. So, just to be clear, Exhibit 9 is -- 7 are screenshots from the flow for cancelling the 8 Facebook Dating unpaid service. Correct? 9 A. It appears to be. 10 Q. Okay. So here, just to be clear, page 1, 11 your -- that's your dating site, and that's a picture 12 of a guy. 13 And then -- and then there's an icon which is 14 a gear icon which you have to click. Right? 15 And then you get to "Settings," and then you 16 have to click on "General" as opposed to "Ideal Match." 17 Do you see that? 18 A. Yes. 19 Q. So if you click on "General," you get to the 20 next page, which is page 3 of the exhibit, and it has 21 several categories: "Dating and Instagram," "Second 22 Look," "Share the Love," and "Account." 23 Do you see that? 24 A. Uh-huh. 25 Q. And then you have to click on "Account" to get</p> <p style="text-align: right;">Page 185</p>

<p>1 to "Delete Profile."  2 Do you see that?  3 A. Uh-huh.  4 Q. Is that a "yes"?  5 A. Sorry. I'm mapping it back here. Yes.  6 "Delete Profile." Yes.  7 Q. Okay. So, then, you click on "Account," and  8 then you click on "Delete Profile."  9 And then you're confronted with a subsequent  10 page, which -- after you click in "Delete Profile,"  11 which says:  12 "Are you sure you want to delete your  13 dating profile?"  14 Do you see that?  15 A. On the very back?  16 Q. Third-to-the-last page. There's a question  17 asking, "Are you sure" --  18 A. Oh, sorry.  19 Q. -- "you want to delete your dating profile?"  20 Do you see that?  21 A. Yes.  22 Q. Now, is that confirmshaming?  23 MR. AIJAZ: Objection. Scope.  24 THE WITNESS: I -- "Are you sure you want to  25 delete your dating profile?"</p> <p style="text-align: right;">Page 186</p>	<p>1 about the context of why Facebook has that rule to  2 understand whether this is manipulative, as in they're  3 trying to, like, you know, impact your -- this decision  4 because they want you to stick around, or there is an  5 actual security or fraud-related issue tied to this.  6 Q. Okay. You don't know?  7 A. I mean, not without the background  8 information.  9 Q. And then there are two buttons under there.  10 One says "Delete Profile," and one you would concede  11 bolder, colorful, darker, says "Take a Break."  12 MR. AIJAZ: Objection. This is a  13 black-and-white --  14 MR. HUMMEL: It is.  15 MR. AIJAZ: -- copy.  16 THE WITNESS: Right.  17 So I don't know -- it's hard for me to tell  18 from this if that is -- was the default. I mean, it  19 could have been equally, and somebody hovered over it.  20 But in this screenshot, that one is bolder.  21 BY MR. HUMMEL:  22 Q. Right. Is "Take a Break" a form of dark  23 pattern?  24 In other words, it's -- this is somebody who's  25 gone all the way to say they want to delete their</p> <p style="text-align: right;">Page 188</p>
<p>1 I would argue that that is a -- you know, that  2 is a question being asked to the user to ensure that  3 they are not making -- making an error.  4 BY MR. HUMMEL:  5 Q. Okay. But, then, there's warning: "You can't  6 create a new dating profile for seven days."  7 MR. AIJAZ: Chad, I don't think she was  8 finished answering.  9 BY MR. HUMMEL:  10 Q. Are you done? I'm sorry.  11 A. Oh, I'm done. I'm sorry.  12 MR. AIJAZ: I was wrong.  13 THE WITNESS: But what's the -- sorry.  14 BY MR. HUMMEL:  15 Q. So there's a question there that says: "Are  16 you sure you want to delete your dating profile?"  17 And under that, there's a warning: "You can't  18 create a new dating profile for seven days."  19 Isn't that confirmshaming?  20 A. So the statement "You can't create a new  21 dating profile for seven days," it -- it potentially  22 can be manipulative, depending on the why.  23 Why can't you create a new dating profile for  24 seven days?  25 You know, at this point, I don't know enough</p> <p style="text-align: right;">Page 187</p>	<p>1 account, and then they say, "Take a Break."  2 Is that potentially manipulative?  3 A. Again, not knowing whether the two buttons  4 were of equal prominence and whether this has changed  5 state, if "Take a break" is highlighted and "Delete  6 Profile" is not, it is clearly trying to steer the user  7 away from deleting their profile.  8 And, in some contexts, that would be arguably  9 a dark pattern because the -- the alternative would be  10 that you present both options to the user and you don't  11 weight one; you give them the ability to make that  12 choice independently.  13 The "Take a break" language -- I mean,  14 clearly, there -- I would argue they're trying to kind  15 of mitigate -- they're trying to make it sound like,  16 you know, it's just easier to take a break rather than  17 actually go all the way through deletion. So they're  18 trying to create an incentive for you to not actually  19 leave.  20 But I -- you know, what would -- what should  21 the alternative be?  22 I mean, that is difficult for me to say  23 because I don't know, kind of, what "Take a break"  24 implies here; if that means it just hides your profile.  25 I don't think I've seen any discussion of that</p> <p style="text-align: right;">Page 189</p>




<p>1 in this -- there's a "Take a break" setting over here,  2 but I don't have a sense of what -- what, functionally,  3 that means here on this page --  4 Q. Okay.  5 A. -- or in this flow.  6 Q. And if you click on "Delete Profile" and not  7 "Take a break," you get the next page, which is the  8 second-to-the-last page of Exhibit 9, which is a  9 "Before you go."  10 And you complained about Match's use of the  11 phrase "Before you go." Correct?  12 A. I did complain about it.  13 Q. So do you complain about this one?  14 A. I wasn't being asked to evaluate that, but --  15 Q. Well, you used it as an example of a good  16 flow.  17 A. So, I mean, the -- to me, the improvement here  18 is that you have already made the final decision here  19 on deleting.  20 Q. Not quite.  21 Look at the last page. You get a survey  22 before you delete, and it's long. A lot of things to  23 read.  24 A. No. This is a confirmation that you've  25 already deleted.</p> <p style="text-align: right;">Page 190</p>	<p>1 the confirmation to you.  2 I mean, iOS will have different rules in terms  3 of how you interact with users than, you know, a  4 browser-based web experience.  5 Q. What effect on subscriber participation does  6 putting the survey after the delete confirmation have?  7 MR. AIJAZ: Participation in what?  8 BY MR. HUMMEL:  9 Q. Well, in Match.com, the cancellation flow, I  10 think you've suggested that the survey should be after  11 the cancellation is complete -- or the unsubscription  12 is complete. Correct?  13 A. I believe so.  14 Q. What impact -- if you got the cancellation  15 confirmation page and then put the surveys, what impact  16 would that have on survey participation?  17 A. I mean, it could potentially increase it in  18 some ways if people are more willing to fill out a  19 survey or are more receptive to doing so at that stage  20 rather than in the middle of the cancellation process.  21 So you may get more truthful answers, for  22 example, rather than somebody who's just, like, "I  23 don't want to fill this thing out," and they just  24 click, click, click to get through it.  25 Q. Do you have any empirical evidence that</p> <p style="text-align: right;">Page 192</p>
<p>1 Q. No. "Delete Profile":  2 "Before you go, help us improve by letting  3 us know why you're deleting Facebook Dating."  4 And, then, there's a button that says either  5 "Skip" or "Next," and then there's a:  6 "You deleted your dating profile. You  7 won't be able to create a new dating profile  8 for seven days."  9 A. Yeah, that's the confirmation.  10 Q. Where is the confirmation?  11 A. This is the --  12 Q. When did the delete happen?  13 A. When you clicked "Delete Profile."  14 Q. On the "Are you sure you want to delete your  15 dating profile?"  16 A. Yes.  17 Q. And then you get a survey?  18 A. Yes, which you can skip. And they give you  19 the clear option to skip it if you want to skip it.  20 Q. And, then, you get the confirmation that  21 you're deleting your dating profile?  22 A. Yes.  23 Q. Okay.  24 A. But this is mobile; this is iOS. So it is  25 possible that on iOS, this is the only way to present</p> <p style="text-align: right;">Page 191</p>	<p>1 consumers would participate at a higher rate if the  2 survey were after the confirmation page?  3 A. I would say, based on having written and  4 conducted many online surveys and survey research, that  5 a fundamental best practice is to be considerate of the  6 user's time and to invite them to do surveys rather  7 than to force them to do surveys.  8 Q. But you've done no empirical analysis on that.  9 Correct?  10 MR. AIJAZ: Objection. Vague.  11 THE WITNESS: I haven't empirically analyzed  12 that in this case; but, again, I have written and  13 conducted many surveys, and I would argue that that's  14 not a standard practice.  15 BY MR. HUMMEL:  16 Q. How do you know, with respect to the Facebook  17 Dating app, that you -- how do you know that the  18 Facebook deletion process is -- well, look at the  19 "Settings" page where it says "Delete profile."  20 And on the survey, it says --  21 A. This one?  22 Q. Yeah, yeah, yeah.  23 What's the first word under "Delete profile"?  24 A. The "Before you go phrase"?  25 Q. Right. So it doesn't say you've already</p> <p style="text-align: right;">Page 193</p>

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<p>1 deleted, so therefore take the survey.  2 It says:  3 "Before you go, help us improve by letting  4 us know why you're deleting Facebook Dating."  5 And it's still the same heading, "Delete  6 profile." Right?  7 So how do you know that the survey is given  8 before the deletion is complete? Because that's not  9 what it says.  10 A. But you have a button on the page before that  11 that clearly states "Delete profile."  12 Q. And then what happens if you click on that?  13 You get a page that says "Delete profile."  14 A. You -- well, I mean, a submenu, but it is  15 clear that you can skip this or go -- or continue.  16 Q. What are you continuing to, then?  17 A. The confirmation.  18 I mean, you always are going to give somebody  19 a confirmation.  20 Q. Isn't this a deceptive way to ask a consumer  21 to give a survey because they believe they haven't yet  22 gone?  23 MR. AIJAZ: Objection. Form. Vague.  24 THE WITNESS: I -- I mean, I would argue that  25 this button telling you that you are confirming that</p> <p style="text-align: right;">Page 194</p>	<p>1 A. Similar. Obviously, not the same profile;  2 but, yes.  3 Q. Did you record or take screenshots of the  4 Facebook or Coffee Meets Bagel flows that you reviewed?  5 A. My assistant took those, and I would need to  6 double-check if I -- if we still have them.  7 MR. HUMMEL: Hasan, we don't have those, so if  8 you could just provide them.  9 Q. Let's look at this, the first page.  10 What button would the consumer have to hit to  11 delete their account?  12 A. So I have not used this extensively. You  13 know, we just mapped this, so I believe it's going to  14 be the "Profile" icon. But, again, I --  15 Q. What's the "Profile" icon; on the upper left?  16 A. I believe so.  17 Q. Little picture with a dot?  18 A. Yeah.  19 Q. Okay. Next to -- to the left of the word  20 "Suggested"?  21 A. Yes. I mean, there's also the little slider  22 bars to the right.  23 Q. Yep. Those are typically -- what's that icon  24 mean?  25 A. That one, I haven't seen consistently. I</p> <p style="text-align: right;">Page 196</p>
<p>1 you are deleting your profile on this page and that you  2 get a final confirmation that the action has occurred  3 is clearer than the flow that we've been arguing about  4 in this case.  5 MR. HUMMEL: Let's take a five-minute break.  6 THE WITNESS: Okay.  7 (Recess from 2:10 P.M. to 2:27 P.M.)  8 (Deposition Exhibit 10 was marked for  9 identification.)  10 BY MR. HUMMEL:  11 Q. Okay. Exhibit 10 is a series of screenshots  12 from the Coffee Meets Bagel cancellation flow.  13 Do you recognize it?  14 MR. AIJAZ: Chad, do you have another copy?  15 MR. HUMMEL: No.  16 Oh, yes.  17 THE WITNESS: Once again, I'm going to take a  18 minute to map it to ...  19 (Reviewing document.)  20 Okay.  21 BY MR. HUMMEL:  22 Q. Is this a -- this set of screenshots,  23 Exhibit 10, do you recognize this as a -- the  24 cancellation flow that you analyzed from the website or  25 the app Coffee Meets Bagel?</p> <p style="text-align: right;">Page 195</p>	<p>1 think this is very much mobile context, so I'm not sure  2 how sliders are being used across apps.  3 I mean, when you go to the second page, they  4 are indicating it is preferences.  5 Q. Don't sliders usually mean filters?  6 A. Well, I mean -- I mean, the reason I'm pausing  7 is that I think I have more commonly seen them with  8 respect to, you know, like, photo apps. So --  9 Q. Well, sometimes, also, if you're looking at,  10 like, hotels.com or a home -- or Zillow, it's filters  11 that allow you to limit a search.  12 A. Yeah. Which, again, like, I -- you know --  13 Q. So you don't know what button you'd have to  14 push on this app to hit to get --  15 A. No. I believe it's the "Profile."  16 Q. Oh, "Profile."  17 So you hit "Profile," and the next page shows  18 "Shelby" as means -- as me. Correct?  19 And then you have to click "Set it." Right?  20 A. Uh-huh.  21 Q. Is that right?  22 A. Yes, I believe so.  23 Q. And what's the icon next to "Settings"?  24 A. The gear setting.  25 Q. It's a gear. Okay.</p> <p style="text-align: right;">Page 197</p>

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<p>1 --o0o--</p> <p>2 I declare under penalty of perjury that the</p> <p>3 foregoing is true and correct. Subscribed at</p> <p>4 _____, California, this ____ day of</p> <p>5 _____ 2023.</p> <p>6</p> <p>7</p> <p>8 JENNIFER KING, PH.D.</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 234</p>	<p>1 M. Hasan Aijaz</p> <p>2 maijaz@ftc.gov</p> <p>3 August 10, 2023</p> <p>4 RE: Federal Trade Commision v. Match Group, Inc., Et Al.</p> <p>5 7/27/2023, Dr. Jennifer King (#6028094)</p> <p>6 The above-referenced transcript is available for</p> <p>7 review.</p> <p>8 Within the applicable timeframe, the witness should</p> <p>9 read the testimony to verify its accuracy. If there are</p> <p>10 any changes, the witness should note those with the</p> <p>11 reason, on the attached Errata Sheet.</p> <p>12 The witness should sign the Acknowledgment of</p> <p>13 Deponent and Errata and return to the deposing attorney.</p> <p>14 Copies should be sent to all counsel, and to Veritext at</p> <p>15 errata-tx@veritext.com.</p> <p>16</p> <p>17 Return completed errata within 30 days from</p> <p>18 receipt of testimony.</p> <p>19 If the witness fails to do so within the time</p> <p>20 allotted, the transcript may be used as if signed.</p> <p>21</p> <p>22 Yours,</p> <p>23 Veritext Legal Solutions</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 236</p>
<p>1 CERTIFICATE OF REPORTER</p> <p>2 I, HOLLY THUMAN, a Certified Shorthand</p> <p>3 Reporter, hereby certify that the witness in the</p> <p>4 foregoing deposition was by me duly sworn to tell the</p> <p>5 truth, the whole truth, and nothing but the truth in</p> <p>6 the within-entitled cause; that said deposition was</p> <p>7 taken down in shorthand by me, a disinterested person,</p> <p>8 at the time and place therein stated; and that the</p> <p>9 testimony of the said witness was thereafter reduced to</p> <p>10 typewriting, by computer, under my direction and</p> <p>11 supervision;</p> <p>12 That before completion of the deposition,</p> <p>13 review of the transcript [X ] was [ ] was not</p> <p>14 requested/offered. If requested, any changes made by</p> <p>15 the deponent (and provided to the reporter) during the</p> <p>16 period allowed are appended hereto.</p> <p>17 I further certify that I am not of counsel or</p> <p>18 attorney for either or any of the parties to the said</p> <p>19 deposition, nor in any way interested in the event of</p> <p>20 this cause, and that I am not related to any of the</p> <p>21 parties thereto.</p> <p>22</p> <p>23 </p> <p>24 HOLLY THUMAN, CSR No. 6834</p> <p>25</p> <p style="text-align: right;">Page 235</p>	<p>1 Federal Trade Commision v. Match Group, Inc., Et Al.</p> <p>2 Dr. Jennifer King (#6028094)</p> <p>3 E R R A T A S H E E T</p> <p>4 PAGE____ LINE____ CHANGE_____</p> <p>5 _____</p> <p>6 REASON_____</p> <p>7 PAGE____ LINE____ CHANGE_____</p> <p>8 _____</p> <p>9 REASON_____</p> <p>10 PAGE____ LINE____ CHANGE_____</p> <p>11 _____</p> <p>12 REASON_____</p> <p>13 PAGE____ LINE____ CHANGE_____</p> <p>14 _____</p> <p>15 REASON_____</p> <p>16 PAGE____ LINE____ CHANGE_____</p> <p>17 _____</p> <p>18 REASON_____</p> <p>19 PAGE____ LINE____ CHANGE_____</p> <p>20 _____</p> <p>21 REASON_____</p> <p>22 _____</p> <p>23 _____</p> <p>24 Dr. Jennifer King Date _____</p> <p>25</p> <p style="text-align: right;">Page 237</p>



# EXHIBIT 12

Redacted in its Entirety

(Filed Under Seal Pursuant to Protective  
Order Regarding Confidential Materials)